CURTIS'S

Botanical Magazine;

OR,

FLOWER-GARDEN DISPLAYED:

IN WHICH

The most Ornamental FOREIGN PLANTS, cultivated in the Open Ground, the Green-House, and the Stove, are accurately represented in their natural Colours.

TO WHICH ARE ADDED,

Their Names, Class, Order, Generic and Specific Characters, according to the celebrated LINNÆUS; their Places of Growth, and Times of Flowering;

Together with the most approved Methods of CULTURE.

A WORK

Intended for the Use of such LADIES, GENTLEMEN, and GARDENERS, as wish to become scientifically acquainted with the Plants they cultivate.

BY *JOHN SIMS*, M.D.

FELLOW OF THE ROYAL AND LINNEAN SOCIETIES.

VOL XLVI.

Being the Fourth of the New Series.

The FLOWERS, which grace their native beds,
Awhile put forth their blushing heads,
But, e'er the close of parting day,
They wither, shrink, and die away:
But THESE, which mimic skill hath made,
Nor scorched by suns, nor killed by shade,
Shall blush with less inconstant hue,
Which ART at pleasure can renew. LLOYD.

London:

Printed by W. & S. COUCHMAN, Throgmorton-Street.

Published by SHERWOOD, NEELY, & JONES, 20, *Paternoster-Row*;

And Sold by the principal Booksellers in Great-Britain and Ireland.

MDCCC XIX.

SHOUT
SHARE
IT

Pub. by S. Curtis, Walworth, Nov. 1. 1808.

Weddell Sc.

PASSIFLORA FILAMENTOSA. PALMATE PASSION-FLOWER.

Class and Order.

MONADELPHIA PENTANDRIA.

Generic Character.

Cal. 5-partitus, coloratus. *Cor.* 5-petala, calyci inserta. *Nectar.* Corona filamentosa. *Pepo* pedicellata.

Specific Character and Synonyms.

PASSIFLORA *filamentosa ;* foliis palmatis quinque-partitis serratis, petiolis biglandulosis, involucro triphyllo, foliolis suborbiculatis serrulatis.

PASSIFLORA *filamentosa ;* foliis palmatis quinque-partitis serratis, petiolis glandulosis, involucro triphyllo serrato, filis coronæ corolla longioribus. *Willd. Sp. Pl.* 3. *p.* 623.

PASSIFLORA *filamentosa ;* foliis quinque-lobis serratis, lobis inferioribus brevioribus, coronis quinque. *Cavan. Diss.* 10. *p.* 461. *t.* 294.

We received this PASSION-FLOWER at the end of August last, from Messrs. LODDIGES and SONS, under the name of *palmata.* It appears evidently to be the *filamentosa* of CAVANILLES and WILLDENOW, though the character added by the latter of having the threads of the corona longer than the corolla, does not hold good in our plant.

It approaches very near to *cærulea,* from which it differs chiefly in having the lobes of the leaves and the involucrum serrated, in the greater brightness of the colours of the corona, and in the corolla exceeding considerably the calyx.

Native of South America, and probably of Jamaica. Is at present cultivated as a stove plant, and appears not to have been before introduced into this country.

The flowers open in the night, and close about noon the next day.

N. 2024.

Pub. by S. Curtis. Walworth. June 1. 1818.

Weddell Sc.

Arbutus Andrachne. Oriental Strawberry-Tree.

****

Class and Order.

Decandria Monogynia.

Generic Character.

Cal. 5-partitus. *Cor.* ovata: ore 5-fido; basi pellucida. *Bacca* 5-locularis.

Specific Character and Synonyms.

Arbutus *Andrachne;* caule arboreo, foliis ovatis integris serratisque, paniculis pubescentibus erectis, baccis polyspermis. *Hort. Kew. ed. alt. 3. p.* 56. *Bot. Reg.* 113.

Arbutus Andrachne. *Sp. Pl.* 566. *Bieb. Fl. taur. cauc.* 1. *p.* 312. *Willd. Sp. Pl.* 2. *p.* 617. *Duham. arb. ed. nov.* 1. 76. *t.* 22. *Prodr. fl. græc.* 1. *p.* 274.

Andrachne frutescens spica erecta, foliis ovatis integerrimis et serratis. *Ehret in Philos. transact. Vol.* 57. *p.* 114. *t.* 6.

Arbutus folio non serrato. *Bauh. Pin.* 460.

Adrachne Theophrasti. *Clus. Hist.* 1. *p.* 48. *Bauh. Hist. Vol.* 1. *part.* 1. *p.* 87. *Park. Theatr.* 1490. *f.* 2. *Raj. Hist.* 2. *p.* 1577.

Lamarck considered the variety with leaves quite entire at the margin as a distinct species, but the form of the leaves differs considerably in different specimens, and even on the same tree, not only in the margins being entire or slightly serrated, but in approaching more or less to a round-oval, or to a lanceolate form. The most remarkable circumstance in this species is, that in the spring it sheds the old red bark, and the young bark is at first green, then turns whitish, and afterwards to different shades of brown, and finally, on the approach of winter, to a deep red.

It

It is sufficiently hardy to bear the cold of our ordinary winters without shelter, but is liable to be much defaced, and in severe frosts to be quite killed, as happened to a very large shrub of this kind which stood for many years in the Apothecaries Botanic Garden at Chelsea, near the entrance. It should never be trusted abroad in frosty weather when young; and indeed it always appears much handsomer in the greenhouse or conservatory. In the late Dr. JOHN FOTHERGILL's greenhouse at Upton, there was one little inferior in size to that at Chelsea, and much more beautiful, which was sold for forty pounds, when this valuable collection was brought to the hammer.

Produces its flowers generally in large terminal erect racemes, in March, April, and May, but rarely or never bears fruit with us. Native of the Levant and the Crimea, growing from the clefts of rocks. Cultivated in Dr. SHERARD's garden at Eltham in 1724. Communicated by JOHN WALKER, Esq.

Pub. by S. Curtis. Walworth. Nov. 1. 1828.

THALICTRUM AQUILEGIFOLIUM, γ. FORMOSUM.
PURPLE-FLOWERING MEADOW-RUE.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 0. *Petala* 4, seu. 5. *Sem.* ecaudata.

Specific Character and Synonyms.

THALICTRUM *aquilegifolium ;* fructibus triangularibus pendulis, stipulis amplexicaulibus, staminibus petalis reflexis caducis longioribus. *Supra No.* 1818 *ubi pete synonyma.*
(α.) *album ;* staminibus albis.
(β.) *incarnatum ;* staminibus incarnatis. *Supra* 1818.
THALICTRUM flore incarnato. *Besl. Hort. Eyst. Ord. vern. I. t.* 11. *f.* 1.
THALICTRUM atropurpureum. *Jacq. Hort. Vind. 3. t.* 61.
(γ.) *formosum ;* staminibus intense purpureis superne dilatatis. *Heic, No.* 2025.
THALICTRUM petaloideum. *Sp. Pl.* 771 ?

After all the pains that the indefatigable DE CANDOLLE has taken with the genus THALICTRUM, we have found it very difficult to decide to which of his species this beautiful variety should be referred. It does not seem to possess any character by which it can be specifically distinguished from *aquilegifolium,* except perhaps the broader filaments ; in which respect it approaches to *petaloideum,* the *stamineum* of the Supplementum Plantarum of the younger Linnæus : but this is described as having a close white panicle, and, what is of more consequence, sessile fruit.

In foliage it corresponds with the other varieties of *aquilegifolium,* as also in the fruit being supported on longish pedicles ; and the stipulation is precisely the same. The petals

are

are four, and still more fugacious, falling off as soon as sufficiently expanded to admit of the escape of the stamens.

A hardy perennial; flowers in May and June; its native country unknown to us. Was communicated by JOSEPH SABINE, Esq. from his garden at South Mimms, who informs us that he received it from his friend, the Rev. JOHN EGERTON, who formerly lived at South Mimms, but now at Bunbury, in Cheshire.

N 2026.

Pub. by S. Curtis. Walworth. Nov. 1 1818.

NEOTTIA ELATA. TALL NEOTTIA.

Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Cor. ringens: petalis exterioribus anticis labello imberbi suppositis, interioribus conniventibus. *Columna* aptera. *Pollen* farinaceum. BROWN *in Hort. Kew.*

Specific Character and Synonyms.

NEOTTIA *elata;* labello obovato emarginato, scapo vaginato, bracteis flore brevioribus, foliis ovatis petiolatis margine planis. *Willd. Sp. Pl.* 4. *p.* 72. *Hort. Kew. ed. alt.* 5. *p.* 199. *Redouté Liliac.* 164.

NEOTTIA elata. *Swartz in Act. Holm.* 1800. *p.* 226.

NEOTTIA *minor;* foliis planis, spathis virentibus. *Jacq. Collect.* 3. *p.* 172. *Ic. rar.* 601. *Bot. Repos.* 376.

SATYRIUM *elatum;* bulbis fasciculatis crassis tomentosis, foliis radicalibus ovatis petiolatis, caule subnudo, nectario subtrilobo. *Swartz Prodr.* 119.

SATYRIUM quintum erectum minus; foliis tenuissimis ovatis, venosis, radicalibus; scapo assurgente, subsquamoso, spicato. *Brown Jam. p.* 324. *n.* 5.

The synonym quoted by WILLDENOW from BROWN's History of Jamaica cannot belong to this plant nor to the genus, none of the flowers of which have "long spurs;" but probably a mistake has arisen from the misprint of the number two, a synonym of the ORCHIS *habenaria* of LINNÆUS, instead of five, which appears to us to have been most probably the synonym SWARTZ meant to have quoted, and which we have accordingly adopted.

The NEOTTIA *elata* is not a plant of any great beauty, but the whole family of *Orchideæ* is more or less interesting, from the singularly various formation of the parts of fructification.

It is a native of Jamaica and Hispaniola. Requires the heat of the stove. Blossoms in April, May, and June. Introduced in 1790 by Mr. JOHN FAIRBAIRN. Communicated by JOHN WALKER, Esq. of Arno's Grove.

CROTALARIA PULCHERRIMA. MYSORE CROTALARIA.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Legumen turgidum, inflatum, pedicellatum. *Filamenta* connata cum fissura dorsali.

Specific Character and Synonyms.

CROTALARIA *pulcherrima ;* caule fruticoso, foliis obovato-cuneatis utrinque sericeo-pubescentibus, racemis terminalibus, bracteis calycibusque coloratis, leguminibus sessilibus oligospermis calyce persistente tectis.

CROTALARIA pulcherrima. *Roxb. Flora ind. inedit. Catal. of Bot. Gard. at Calcutta.*

The CROTALARIA *pulcherrima* is a pretty *shrub* of low growth and much branched, bearing its fine yellow flowers in short terminal racemes, *bractes* cordate-acuminate ; *calyx* five-cleft ; *segments* unequal, the two upper ones being considerably the largest ; *Legumes* sessile, enclosed within the persistent calyx : *seeds* few, and generally only one comes to maturity.

Native of Mysore, from whence Dr. BUCHANAN sent the seeds to the botanic garden at Culcutta.

We were favoured with the specimen from which our drawing was taken by the Honourable WILLIAM HERBERT, from his collection at Spofforth, who informs us that he raised it from seeds he received from Calcutta, and that his plant of four years growth is about three feet high, and spreads wide, throwing out many branches, and is now more disposed to increase the number of these than the length.

The

The flowers are produced in the winter only, and the plant requires much water when in flower, drooping whenever the sun shines powerfully. In the summer it does not seem to be so thirsty. From Dr. Roxburgh's manuscripts we learn, that at Calcutta it blossoms in January, and ripens its seeds in March.

Mr. Herbert has received seeds of the same species from the Mauritius, which produced plants differing in nothing from the Calcutta ones, except that the leaves of the former were longer and somewhat more pointed than in the latter; a considerable difference, in which respect we observe even in the specimen from which our drawing was made.

LAURUS CINNAMOMUM. CINNAMON-TREE.

****

Class and Order.

ENNEANDRIA MONOGYNIA.

Generic Character.

Cal. 0. *Cor.* calycina, 6-partita. *Nectarium* glandulis tribus, bisetis, germen cingentibus. *Filamenta* interiora glandulifera. *Drupa* 1-sperma.

Specific Character and Synonyms.

LAURUS *Cinnamomum ;* foliis trinerviis ovato-oblongis : nervis versus apicem evanescentibus. *Willd. Sp. Pl.* 528. 2. *p.* 477. *Blackw. Herb. t.* 354. *Bot. Repos.* 596. *Woodv. Med. Bot.* 80. *t.* 27. *Gærtn. Sem.* 2. 69. *Plenck ic.* 312.

LAURUS *Cinnamomum ;* foliis suboppositis trinerviis ovato-oblongis, nervis versus apicem evanescentibus, panicula terminali. *Lam. Encycl.* 3. *p.* 441. *Persoon Syn.* 1. *p.* 448.

CINNAMOMUM foliis latis ovatis, frugiferum. *Burm. Zeylan.* 62. *t.* 27.

CINNAMOMUM, s. Canella Zeylanica. *Bauh. Pin.* 408.

CASSIA cinnamomea. *Herm. Lugdb.* 129. *t.* 655.

In our account of LAURUS *Cassia,* No. 1636, we have erroneously stated Mr. BROWN's opinion to be that Laurus *Cinnamomum* and Laurus *Cassia* are generally distinct ; this learned botanist separates *Cinnamomum* as a genus from *Laurus,* but considers the Cassia and the Cinnamon as species of the same genus.

LAURUS *Cinnamomum* is the tree that produces the far famed spice, the true Cinnamon, so generally admired for its fine aromatic pungent flavour, and held in general estimation both as an ingredient in cookery and in medicine.

We

We have not quoted either JACQUIN or LOUREIRO in our synonymy, from a doubt whether the Cinnamon of Martinique and the wild Cinnamon of Cochin-China really belong to this species or not.

We have formerly mentioned the liability of the leaves of the Cinnamon to be defaced by the scorching heat of the sun in our stoves; but this defect seems to be entirely remedied in Mr. LODDIGES' new stove, heated by steam, where the leaves are continually in high beauty.

Native of the island of Ceylon in the East-Indies. With us it must be kept constantly in the stove. Flowers in June, July, and August, according to the Hortus Kewensis from December to February. Propagated by layers or cuttings. Cultivated by PHILIP MILLER before 1768. Communicated by Messrs. LODDIGES and SONS.

N.2029.

PELARGONIUM DASYCAULON. THICK-STEMMED PELARGONIUM or STORK'S-BILL.

Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitus : lacinia suprema desinente in tubulum capillarem, nectariferum, secus pedunculum decurrentem. *Cor.* 5-petala, irregularis. *Filam.* 10, inæqualia, quorum 3—6 castrata. *Arilli* 5, 1-spermi, aristati, ad basin receptaculi rostrati : aristis spiralibus introrsum barbatis.

Specific Character and Synonyms.

PELARGONIUM *dasycaulon ;* foliis carnosis pinnatis : pinnis pinatifidis apice truncato-trifidis, caule crasso tuberculato.
PELARGONIUM *dasycaule ;* foliis subbipinnatifidis, pinnulis oblongis obtusissimis apice trifidis, caule senecto ramoso crasso carnoso pedali. *Haworth Succul.* p. 309.

This species is too nearly related to PELARGONIUM *cerato-phyllum,* (Vide No. 315) from which it differs principally in the leaves being more thickly pinnate, with the pinnæ again deeply divided.

Its native country not certainly known. Is more tender than most of the Cape caulescent species, and should be kept in the dry stove in the winter months. Flowers from July to December. Propagated by cuttings. Communicated by Messrs. WHITLEY, BRAME, & MILNE.

EPIDENDRUM UMBELLATUM. UMBELLED EPIDENDRUM.

****

Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Columna cum ungue labelli longitudinaliter connata in tubum (quandoque decurrentem ovarium). *Massæ pollinis* 4, parallelæ, septis completis persistentibus distinctæ, basi filo granulato elastico auctæ. BROWN.

Specific Character and Synonyms.

EPIDENDRUM *umbellatum ;* caule simplici, foliis oblongis subemarginatis, floribus in sinu folii terminalis confertis, lamina labelli triloba : lobo intermedio emarginato. *Swartz Nov. Act. Ups.* 6. *p.* 68. *Prodr.* 121. *Willd. Sp. Pl.* 4. *p.* 117. *Hort. Kew. ed. alt.* 5. *p.* 218. *Persoon Syn.* 2. *p.* 518. *Bot. Reg.* 80.

EPIDENDRUM *difforme ;* foliis caulinis oblongis, floribus terminalibus aggregatis, nectarii tubo longitudine corollæ *Jacq. Amer.* 223. *t.* 126.

DESCR. *Stems* simple, assurgent, the lower parts covered by the persistent remains of the stem-embracing petioles. *Leaves* alternate, fleshy, oblong-oval, emarginate. *Flowers* growing in a nearly sessile umbel from the bosom of the uppermost leaf, green, waxen, sweet-scented. *Germen* club-shaped, an inch and a half in length, incurved. Five *petals*, spreading nearly equal, internal ones narrowest, sides revolute. *Labellum* nearly circular revolute, three-lobed : *middle lobe* deeply emarginate ; *column* straight, truncated, hollowed at the point, on the under side of which only it is attached to the labellum ; *anther* a deciduous operculum, 4-celled,

4-celled, containing *4 pollen masses* which remain attached to the hollow in the apex of the column, the *stigma*, when the lid falls off.

This very rare species of EPIDENDRUM was communicated by Messrs. LODDIGES and SONS, in whose stove, heated by steam, these plants, considered so difficult to be preserved, are cultivated with the greatest success. Native of Jamaica. Flowers in June and July. Introduced in 1793 by the late Vice-Admiral WILLIAM BLIGH in his Majesty's Ship Providence.

N 2031.

Pub. by S. Curtis. Walworth. Dec. 1. 1812.

Wed. P. S.

GENTIANA CRINITA. JAGGED-FLOWERED GENTIAN.

Class and Order.

PENTANDRIA DYGYNIA.

Generic Character.

Cor. 1-petala. *Caps.* 2-valvis, 1-locularis; *Receptaculis* 2, longitudinalibus.

Specific Character and Synonyms.

GENTIANA *crinita;* corollis quadrifidis inciso-fimbriatis, calycibus tetragonis erectis: segmentis alternis marginatis, foliis lanceolatis, pedunculis unifloris.

GENTIANA *crinita;* corollis quadrifidis: laciniis inciso-ciliatis, foliis lanceolatis acutis, caule erecto tereti. *Froelich Gent. p.* 112. *n.* 44. *Willd. Sp. Pl.* 1. *p.* 1352. *Persoon Syn.* 1. *p.* 287.

GENTIANA *crinita;* caule tereti, ramis elongatis unifloris, foliis lanceolatis acutis, corollis 4-fidis: laciniis obovatis inciso-ciliatis, plicis interioribus simplicibus. *Pursh Fl. Am. Sept.* 1. *p.* 185.

GENTIANA fimbriata. *Bot. Repos.* 509.

We were favoured with this very beautiful Gentian by Mr. WILLIAM KENT, from his fine collection at Clapton, in August last.

At No. 639 of this work we have given a figure of a species of Gentian from Siberia, under the name of *ciliata;* in our account of which we mentioned our doubt, whether the European, Asiatic, and American varieties, might not be distinct species, we have since been informed by Dr. T. FISCHER of Gorenki, that the species there figured is certainly

GENTIANA *barbata*, and different from *ciliata*. The true GENTIANA *ciliata*, native of the South of Europe, is probably not to be found in America at all; our present plant is indigenous to North-America, from New-York to Carolina. The flowers are considerably larger than those of *barbata*, of a fine sky-blue, and the petals are covered along the whole margin with a beautiful waving fringe.

A hardy perennial. Flowers in August and September. Propagated by seeds or parting its roots. Introduced in 1804.

We know of no representation of this plant but the one done from very imperfect seedling specimens with one flower, in the Botanist's Repository, which we should hardly have taken for the same plant, had it not been quoted by PURSH.

NERIUM ODORUM, γ. CARNEUM.

****

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Contorta. *Folliculi* 2, erecti. *Semina* extremitate superiori comosa. *Cor.* hypocrateriformis: faux coronata squamis quinque, divisis.

Specific Character and Synonyms.

NERIUM *odorum ;* foliis lineari-lanceolatis ternis, foliolis calycinis erectis, nectariis multipartitis: laciniis filiformibus. *Hort. Kew. ed. I. 2. p.* 67. Synonyma supra, No. 1799 petenda.

Carneum ; *floribus carneis, nectariis ad dimidium fere integris superne laceris: segmentis filiformibus foliis lineari-lanceolatis.*

NERIUM flore carneo. *Weinm. Phyt. v.* 4. *t.* 755. ?

BELUTTA-ARELI *Hort. Malab.* 9. *p.* 3. *t.* 2?

The more we consider the varieties of Nerium *oleander* and *odorum,* the more difficulty we find in distinguishing the species, and we are inclined to think that after all perhaps LINNÆUS was right in considering these plants as mere varieties. LAMARCK supposed that he found a specific distinction in the arista of the anther, being bearded in the latter and smooth in the former, in addition to the difference in the corona or nectarium pointed out by SOLANDER, in the first edition of AITON's Hortus Kewensis; but we do not find that this distinction holds good, the termination of the anther being hairy in both: and if the difference of the corona or nectarium is sufficient to establish a specific distinction, our plant may be considered as distinct from both, being more unlike in this respect

respect to either than they are to one another. This part in our plant consisted of five strap-like laciniæ, quite entire nearly half-way up, and then uniformly divided into a filiform fringe.

The double variety given above (No. 1799) from the breadth of its leaves and more robust habit, is supposed by many to belong to the European plant; but its history points out an Indian origin, and there can be no doubt of its being the same as the Tsjovanna-Areli of the Hortus Malabaricus*.

The flowers of our plant were delightfully fragrant, more so than we have observed in any other variety.

Perhaps we ought rather to have considered this as variety α. of Nerium *odorum*, which is said to vary in the colour of its flowers, but on account of the remarkable corona, we have preferred giving it as a distinct variety: but it remains to be examined whether this part is constant in the different varieties or species.

Communicated by Mr. William Kent, of Clapton, who raised it from cuttings brought to him by a friend from Paris.

---

* In the account of the two first species of Nerium, in Willdenow's edition of the Species Plantarum, there are two errors, one of which has been followed by most succeeding writers. The note to the first species, Nerium *oleander*, belongs to variety β of the second. Tab. 1. and 2. of the 9th volume of the Hortus Malabaricus are misquoted; tab. 1. belongs to variety ε. tab. 2. to the single variety.

N 2032.

Pub. by S. Curtis. Walworth. Dec. 1. 1821.

Weddell, S.

N 2033.

Pub. by S. Curtis Walworth. Dec. 27 1828.

QUISQUALIS INDICA. INDIAN QUISQUALIS.

****

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. superus: tubo longissimo, 5-fido. *Petala* 5, fauci calycis inserta, marcescentia. *Stam.* 10. in duplici serie. *Drupa* 5-angularis.

Specific Name and Synonyms.

QUISQUALIS indica. *Sp. Pl.* 556. *Rumph. Amboyn.* 5. *p.* 71. *t.* 38. *Willd. Sp. Pl.* 2. *p.* 579. *Persoon Syn.* 1. *p.* 470. *Lamarck Ill. t.* 357.
QUISQUALIS glabra. *Burm. Ind. p.* 104. *t.* 28. *f.* 2.
QUISQUALIS pubescens. *Burm. Ind. p.* 104. *t.* 35. *f.* 2.
UDANI *Malayensibus.*

The smooth and pubescent varieties of BURMAN appear to be the same.

The fanciful name of *Quis Qualis* was given to this plant by RUMPHIUS, which has been since joined into one word. The Malays call it UDANI. The account which this author gives of it is very curious; the young plant, he observes, grew up into an upright shrub, about three feet high, with few and irregular branches, and scattered leaves without order. After six months it put forth from the root a runner much stouter than the principal stem of the first shrub, which climbed up the neighbouring trees, throwing out branches, twisted in and out in all directions, but not twining round their supporters; after the appearance of this shoot the original shrub ceased to grow and finally perished. Before it divided into branches the leaves of the new shoot grew by threes, one of which was always a little higher up than the other two, and towards the top the leaves became more distant, till they became solitary; the leaves falling off the

persistent

persistent footstalks changed to thick strong spines. From the axils of these leaves other branches grew, some with opposite and others with alternate leaves; and from the extreme branches the flowers are produced in a sort of umbel or cyme, or solitary from the axils of the upper leaves.

The *calyx* is a very long tube, in the faux of which the petals are inserted alternating with the segments of the calyx; *stamens* ten, inserted into the tube of the calyx in two rows. *Germen* inferior, one-celled, five cornered. When the petals first expand they are perfectly white, but soon change to a flesh colour, and finally to blood-red. Rumphius observes that in the morning the flowers are white, reddish at noon, rose-coloured in the evening, and the next day blood-red. The changes in our plant were not quite so rapid.

Jussieu, in conformity to Linnæus's opinion, has united *Quisqualis* to his natural order of *Thymeleæ*, to which order it has certainly a near affinity in the one-celled germen, tubular calyx, and marcescent petals, inserted in the calyx, having the same relation to it as the squamæ in Gnidia, &c. But in the *Thymeleæ* the germen is superior, the calyx being in no part adherent: whereas in *Quisqualis* the calyx adheres to the germen. It is perhaps on this account chiefly that Mr. Brown unites it with his order of *Combretaceæ*.

This plant, with some others of the same natural order, affords, as Mr. Brown has remarked, a strong argument in favour of Jussieu's doctrine respecting calyx and corolla.

The natives make great use of this plant. The young leaves, which have a warm pungent taste like radish, are eaten raw, either by themselves or mixed with lettuce; they likewise enter into various compositions for medical purposes. The unripe fruit is a very efficacious remedy for worms, and what is remarkable, the ripe kernel, which is sweet to the taste like almonds, has likewise the same anthelmintic property. But it is observed that, though some persons, and among these Rumphius himself, could eat these kernels with pleasure and impunity, in others they soon produced nausea, followed by a troublesome hickuping. Native of the East-Indies. Introduced about three years ago by Messrs. Whitley, Brame, and Milne, in whose stove it flowered in June last for the first time, and to whom we are indebted for an opportunity of taking a drawing of it.

N 2034.

Pub. by S. Curtis, Walworth, Dec. 1. 1803.

CURCULIGO LATIFOLIA. BROAD-LEAVED CURCULIGO.

****

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. supera, 1-petala: limbo 6-partito. *Bacca* polysperma, corollæ parte inferiore persistente coronata.

Specific Character and Synonyms.

CURCULIGO *latifolia;* foliis ellipticis, capitulo sessili, tubo floris vix longiore limbo. *Hort. Kew. ed. alt.* 2. *p.* 253.
INVOLUCRUM. *Rumph. Amb.* 6. *p.* 114. *t.* 53.

For an account of the Genus CURCULIGO by Mr. KER, consult No. 1076 of this work, where the CURCULIGO *brevifolia* of Hortus Kewensis is given as a variety of CURCULIGO *orchioides* of ROXBURGH; but these plants are now considered as distinct species.

RUMPHIUS's name of INVOLUCRUM is a translation of the vulgar Malay name, signifying a wrapper, from the use the natives make of the leaves to wrap up fruit, fish, or other articles, which they carry about for sale, or send for presents; to which purpose RUMPHIUS observes they are particularly well adapted, being boat-shaped, narrowed at both ends, soft and pliable, so that they readily cover whatever is wrapped in them.

Native of Amboyna and Poolo Pinang. Requires to be kept in the stove except in very warm weather. Flowers most part of the summer. Introduced in 1804 by Mr. JOHN ALLEN. Communicated by Mr. JENKINS, Nurseryman, Gloucester-Place, New-Road.

CRASSULA FALCATA. SICKLE-LEAVED CRASSULA.

Class and Order.

PENTANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5. *Squamæ* 5, nectariferæ ad basin germinis. *Caps.* 5.

Specific Character and Synonyms.

CRASSULA *falcata*; foliis oblongis falcatis glaucis obtusis basi connatis. *Hort. Kew. ed. alt.* 2. *p.* 191.
CRASSULA obliqua. *Bot. Repos.* 414.
CRASSULA retroflexa. *Meerb. ic. fasc.* 2. *p.* 16.
ROCHEA falcata. *Plant. Grass.* 103.
LAROCHEA falcata. *Persoon Syn.* 1. *p.* 337.

A figure of this plant having been given by Mr. ANDREWS, in the Botanist's Repository, erroneously for *Crassula obliqua*, it is generally known by that name in our nurseries.

The eminent botanist M. DECANDOLLE, in his *Plantes grasses*, has separated this species and CRASSULA *coccinea* from the rest of the genus, and erected them into a new genus under the name of ROCHEA, altered in PERSOON's synopsis to LAROCHEA, being dedicated to the memory of M. DE LA ROCHE, author of a monograph on Ixia and Gladiolus. This genus has been adopted by Mr. HAWORTH, who has doubtingly added to it three other species, but as all of them, as far as appears by the character, differ in nothing from CRASSULA but in the cohesion of the petals at their base, and the genus is not taken up in the last edition of the Hortus Kewensis, we have judged it better to retain the name given it in the last-mentioned work.

In our specimen the nectariferous scales were quite obsolete, but as these make part of the character of the genus LAROCHEA, the want of them is probably not general.

A Greenhouse

A Greenhouse shrub, or more properly kept with other succulents in the dry stove. Native of the Cape of Good Hope. Blooms at most seasons of the year. Our drawing was made in December. Flowers very fragrant, much resembling honey-suckles. Propagated by cuttings. Introduced about the year 1785. Communicated by Messrs. Loddiges and Sons.

ERRATA.

No. 381, p. 2019, l. 21, *for* "Prof. James E. Smith," *read* "Sir James E. Smith."

No. 382, p. 2025, l. 5, *for* "South," *read* "North."

l. 7, *for* "South," *read* "North."

p. 2028, l. 25, *for* "generally," *read* "genericallly."

PLECTRANTHUS FORSKOHLÆI. FORSKOHL'S PLECTRANTHUS.

Class and Order.

DIDYNAMIA GYMNOSPERMIA.

Generic Character.

Cal. 2-labiatus, labio inferiore diviso, striatus: fructifer, basi subtus gibbosus. *Cor. lab. superius* 3-fidum, lacinia media biloba: *inferius* longius, integrum (plerumque concavum). *Stamina* declinata, filamentis edentulis (nunc basi connatis): *antheris* unilocularibus, imberbibus. BROWN.

Specific Character and Synonyms.

PLECTRANTHUS *Forskohlæi;* foliis carnosis ovatis rugosis in petiolum decurrentibus: superioribus subintegerrimis, racemis verticillatis aphyllis, corollis concoloribus.

PLECTRANTHUS *Forskolæi;* nectario gibboso, racemis aphyllis, caule æquali. *Vahl Symb.* 1. *p.* 44. *Willd. Sp. Pl.* 3. *p.* 169. *Hort. Kew. ed. alt.* 3. *p.* 425.

PLECTRANTHUS barbatus. *Bot. Repos.* 594.

OCIMUM *hadiense;* foliis ovatis obtusis crenatis villosis flexilibus, floribus retrofractis. *Forsk. Descr.* 109.

DESCR. Stem frutescent at the lower part: branches herbaceous, obtusely four-cornered, hairy: hairs pointing upwards. *Leaves* oval, crenate towards the apex, rugose, reticulately veined, seven-nerved, smooth on the upper surface, tomentose on the under; fleshy not flexile, continued down the *petiole*, which is ciliated. *Raceme* terminal, a foot long, verticillated, without bractes or floral leaves. *Pedicels* hairy, longer than the calyx. *Calyx* bilabiate, gibbose at the base, hairy: *upper lip* trifid. Middle segment broad, round-oval acuminate, 2 lateral ones very narrow, acute, ciliated

ciliated with glandular hairs: *under lip* bifid, segments narrow acute like the lateral segments of the upper lip, but a fourth part longer. *Corolla* ringent; *tube* refracted, gibbose above. *Upper lip* short, three lobed, rounded, bearded: *lower lip* canoe-shaped, acute, hairy along the keel, containing the *stamens* which are declined; *filaments* not toothed, united half-way, inserted at the entrance of the tube: *anthers* 4-lobed, one-celled. *Pollen* globose. During æstivation, that is in the bud, in its unexpanded state, the upper lip is superincumbent on the lower.

Ocimum *scutellarioides* of which we gave some account at No. 1446, is certainly a congener of our present plant, which is undoubtedly the Plectranthus *Forskohlæi* of the Hortus Kewensis; but we are not quite so sure that it is the Ocimum *hadiense* of Forskohl, as he distinguishes that species by its having flexible leaves, which in our plant are fleshy and brittle, corresponding better with Forskohl's description of the leaves of his Ocimum *Zatarhendi*, the flowers of which agree perfectly with those of our Ocimum *scutellarioides*, but not with our present plant.

Flowers in October and November. Propagated by cuttings. Native of Arabia-Felix and Abyssinia. Introduced in 1806 by Viscount Valentia, now Earl of Mountnorris, whose ardour in the pursuit of natural knowledge is well known. Communicated from the stove of James Vere, Esq. of Kensington Gore, by Mr. William Blake, his gardener.

Obs. The leaves are extremely bitter to the taste, the calyxes aromatic and pungent.

When compared with the usual form of labiate flowers, as in the dead-nettle for instance, the lower lip in Plectranthus corresponds with the upper in Lamium, and covers the stamens; in like manner the upper lip of the former corresponds in form with the lower, on which account these flowers are said to be resupinate; but this position of parts is natural from the first formation of the flower, and not as in many of the Orchis tribe, occasioned by the twisting of the germen or peduncle, by which means the position of the flower becomes changed from what it was during æstivation; to which change of position some writers seem exclusively to apply the term *resupination*.

Pub by S. Curtis Fenwerth. Jan. 1. 16

STAPELIA STRICTA. UPRIGHT STAPELIA

****

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Asclepiadea. *Nectarium* duplici stellula tegente genitalia.

Specific Character.

STAPELIA *stricta;* corolla quinquefida: laciniis ovatis acuminatis planiusculis nudis, ligulis obtusis, rostris brevissimis, ramis tetragonis simplicibus strictis basi floriferis.

There is a good deal of affinity between this species and *divaricata*. The shape and denticulation of the stems, as well as the colour of the corolla, are exactly similar, but in other respects there is great difference; the laciniæ of the corolla are not ciliated in *stricta*, nor rolled back at the margins, nor so sharp pointed as in *divaricata;* the peduncles are shorter than the flower, and grow from near the base, and the branches are simple and quite erect, in both which characters it differs widely from *divaricata*.

It has been sometimes called in our collections STAPELIA *rufa;* but has no similarity to the *rufa* of Masson; nor do we find that this species has been recorded by any author.

Native of the Cape of Good-Hope. Requires a good greenhouse or dry stove. Flowers in October. Communicated by N. S. HODSON, Esq. Abbey-House, Bury St. Edmunds.

. Curtis. Walworth. Jan. 1. 1818.

Weddell S.

DIANTHUS ARENARIUS. SAND PINK.

Class and Order.

DECANDRIA DIGYNIA.

Generic Character.

Cal. cylindricus, 1-phyllus, basi squamis 4. *Petala* 5, unguiculata. *Caps.* cylindrica, 1-locularis.

Specific Character and Synonyms.

DIANTHUS *arenarius;* caulibus subunifloris, squamis calycinis ovatis obtusis, corollis multifidis, foliis linearibus. *Fl. Suec.* 343 .384. *Sp. Pl.* 589. *Willd.* 2. *p.* 681. *Smith in Lin. Soc. Trans.* 2. *p.* 296.

Sir JAMES E. SMITH, in his remarks upon the genus DIANTHUS in the second volume of the Transactions of the Linnean Society, observes, that LINNÆUS was the only authority for this plant, and that the specimen in his herbarium is from Sweden. In the herbarium of Sir JOSEPH BANKS, the only specimen is from the collection of a Swedish botanist, which agrees very well with our plant, but is not very perfect. We have not ventured to add any of the synonyms usually affixed to this species, because none of them probably are correct, LINNÆUS, as we are informed by SMITH, erased from his own copy of the species plantarum the synonyms of BAUHIN and CLUSIUS; that of DODONÆUS he remarks ought also to be struck out, nor does he find any good reason to depend upon those of LE MONNIER and SAUVAGES; and that of SCOPOLI, since added, must certainly share the fate of CLUSIUS's.

Unwilling to run the risk of misleading with regard to a species so rare and so little understood by botanists in general, we have applied to our friend, the president of the Linnean Society, who is always ready to lend his assistance in establishing the Linnean species; and we have had the satisfaction of learning from him that our present subject is certainly the DIANTHUS *arenarius* of LINNÆUS.

The

The plant divides immediately from the root into a number of woody branches, terminated by fasciculated leaves, from the centre of which a single stem proceeds, bearing seldom more than two flowers, which are white: the petals are minutely cut to below the middle, and are marked with a faint greenish spot, covered with short dark purple hairs.

A hardy perennial. Flowers in August. Communicated by Mr. William Kent, from his collection at Clapton.

Dianthus Carthusianorum, β. Carthusian Pink.

Class and Order.

Decandria Digynia.

Generic Character.

Cal. cylindricus, 1-phyllus: basi squamis 4. *Petala* 5, unguiculata. *Caps.* cylindrica, 1-locularis.

Specific Character and Synonyms.

Dianthus *carthusianorum;* floribus subaggregatis, squamis calycinis aristatis tubo brevioribus, foliis linearibus trinerviis. *Smith in Lin. Soc. Trans.* 2. *p.* 299.

Dianthus *carthusianorum;* floribus subaggregatis, squamis calycinis ovatis aristatis tubo brevioribus, involucro oblongo aristato capitulo breviore, foliis linearibus trinerviis. *Willd. Sp. Pl.* 2. *p.* 671.

Dianthus carthusianorum. *Hort. Ups.* 105. *Pollich Pal. n.* 409.

(α.) *floribus subaggregatis, capitulis compositis.*

Caryophyllus montana I. *Tabern.* 287. *ed. Germ.* 668.

(β.) *floribus aggregatis capitatis, foliis uninerviis.*

Caryophyllus sylvestris flore rubro plurimo de summa caule prodeunte. *Seguier Veron. v.* I. *p.* 434. *t.* 7. *f.* 2.

Caryophyllus arvensis, calyculo florum numeroso. *Loes. Pruss.* 37. *f.* 7.

Dianthus. Carthusianorum. *Kniph. Cent.* 7. *n.* 22.

Dianthus atrorubens, Jacquini?

Descr. *Stems* upright, a foot and a half high, simple, nearly smooth, though some roughness may be felt by the lips. *Leaves* linear-lanceolate, acute, without evident lateral nerves, but

but striated when dry, rough at the margins, pairs more distant at the upper part of the stem. *Flowers* collected into a close capitulum, eight or twelve together, but seldom more than one or two are expanded at the same time. *Involucrum* of several oblong oval leaflets, with a membranous margin, and an awn growing from a little below the point, somewhat shorter than the capitulum: *scales of the calyx* ovate, awned, of a dark purplish rusty colour, shorter than the *tube*: *segments* erect, acute. *Claws* of the petals very long: *limb* wedge-shaped, serrated at the tip, of a rich purple colour, larger than those of the Sweet William.

When we gave the DIANTHUS figured at No. 1775 for the *atrorubens* of JACQUIN, we had not seen this plant, which we now think more resembles his figure than that, at least in the form and colour of the involucrum. Perhaps they may be all considered as varieties of DIANTHUS *carthusianorum*, of which species we have no doubt our present plant is the variety β of the species Plantarum, and as such we find it recorded in the Banksian herbarium. This variety seems however to be constant in having the flowers sessile in a terminal capitulum, and the character of "floribus *sub*-aggregatis" applies to the variety α only, being in no species more perfectly aggregate than in this. In our plant the leaves are not evidently 3-nerved. These characters may be sufficient to distinguish it as a species from variety α; and perhaps we should have done right in applying the name of *atrorubens* to this, rather than to the one we have so denominated, which differs from this in the smaller size and greater number of flowers in the same capitalum; in the involucrum being much larger and longer, with the lower leaflets embracing the whole base of the capitulum and extending beyond it; in all which respects it recedes from our plant, and agrees with the specimens of DIANTHUS *ferrugineus* preserved in the Banksian Herbarium. We hope to have another opportunity of illustrating the varieties of DIANTHUS *carthusianorum*.

A hardy perennial or rather biennial, propagated by slips or by seeds. Flowers in August and September. Communicated by Mr. JENKINS, from his Botanic Garden, Gloucester-Place, New-Road.

N. 2040.

Weddell. Sc.

STEVIA PEDATA. SEVEN-CLEFT STEVIA.

Class and Order.

SYNGENESIA POLYGAMIA ÆQUALIS.

Generic Character.

Recept. nudum. *Pappus* paleaceus. *Cal.* cylindraceus ex simplici foliolorum serie.

Specific Character and Synonyms.

STEVIA *pedata;* herbacea, foliis petiolatis digitato-pedatis integerrimis, pappo paleaceo æquali.
STEVIA pedata; *Willd. Sp. Pl.* 3. *p.* 1776. *Hort. Kew. ed. alt.* 4. *p.* 510. *Cavan. Ic.* 4. *p.* 33. *t.* 356.
HYMENOPAPPUS pedatus. *Lagasca Hort. Matrit.*

DESCR. *Stem* erect, somewhat hispid, branched towards the top. *Leaves* alternate, pedate, generally seven cleft: leaflets linear, quite entire, margins revolute. *Petiole* channelled, trifid at the point, the middle segment carrying one, the two lateral ones generally three leaflets. Flowers grow in a lax corymb, terminating branchlets mostly 3-flowered. *Calyx* of a simple series of carinated leaflets, each embracing a floret. *Florets* all tubular, white, *limb* 5-cleft, twisted. *Anthers* dark purple. *Germens* angular obconical: *Pappus* many leaved, membranaceous, regular, and even at top: *Stigmas* white, revolute. *Receptacle* honey-combed.

A hardy annual. Native of Mexico. Flowers from July to the end of September. Introduced in 1803 by Sir JAMES E. SMITH. Our drawing was made from a specimen communicated by Messrs. WHITLEY, MILNE, and Co. We received the same also from A. B. LAMBERT, Esq. out of his collection at Boyton.

PASSIFLORA QUADRANGULARIS. SQUARE-STALKED PASSION-FLOWER.

Class and Order.

MONADELPHIA PENTANDRIA.

Generic Character.

Cal. 5-partitus, coloratus. *Cor.* 5-petala, calyci inserta. *Nectar.* corona filamentosa. *Pepo* pedicellata.

Specific Character and Synonyms.

PASSIFLORA *quadrangularis ;* foliis oblongo-ovatis subcordatis integerrimis venosis, petiolis sex-glandulosis, stipulis subrotundo-ovatis, involucro triphyllo, caule membranaceo tetragono. *Willd. Sp. Pl.* 3. *p.* 608. *Persoon Syn.* 2. *p.* 219. *Hort. Kew. ed. alt.* 4. *p.* 148.

PASSIFLORA *quadrangularis ;* foliis indivisis ovalibus subcordatis glabris multinerviis, petiolis sex-glandulosis, caule membranaceo tetragono, stipulis ovali-oblongis. *Hort. Kew. ed.* 1^ma. 3. *p.* 306. *Bot. Reg.* 14.

PASSIFLORA quadrangularis. *Spec. Pl.* 1356. *Jacq. Amer. p.* 231. *t.* 143. *Swartz Obss.* 332. *Cav. Diss.* 10. *p.* 453. *t.* 283. *Sowerby in Lin. Soc. Trans.* 2. *p.* 21. *t.* 3. *f. a. Miss Lawrence's Passion Flower.*

Stem winged, 4-sided, climbing. *Leaves* alternate, oval, subcordate, smooth, reticulately veined underneath. *Stipules* oblong-oval, oblique. *Petioles* channelled, bearing three pair of glands. *Peduncles* solitary, one flowered, opposite the petiole, with a tendril between them. *Involucrum* of three roundish obtuse leaves, overlapping one another at the base, close to the flower. *Calyx* or outer segments thick, spongy, three-nerved, green without and white within. *Corolla* or inner segments of the calyx equal to the outer, white without, pale

pale red within. Exterior rays of the *nectarium* longer than the petals, variegated: middle rays very short, white: inferior ones twice as long, converging round the column. *Filaments* spotted: *Anthers* white: *Germen* oblong-oval, white. *Styles* purplish: *Stigmas* 3-lobed, large, very white. (SWARTZ describes them as black).

Cultivated in gardens in the West-Indies, but whether indigenous there seems doubtful. The fruit is as large as a swan's egg; its pulp is eaten with wine, either with or without the seeds, and much esteemed for its supposed cooling quality. From its quick growth and thick foliage, it is well suited for forming arbours and covered walks, but JACQUIN observes that they are apt to be infested by venomous serpents, who choose the Passion-flowers, more especially this species and the laurel-leaved, for their abode, well knowing that their favourite prey, the squirrels, no where more abound, these animals being fond of these fruits.

Requires the constant protection of the stove, of which it is one of the greatest ornaments. Propagated by cuttings or by seeds, which last are seldom produced here. Flowers in August and September. Communicated by Mr. BLAKE, from the very curious collection of JAMES VERE, Esq. Kensington-Gore.

CHRYSANTHEMUM INDICUM. β. CHANGEABLE WHITE INDIAN CHRYSANTHEMUM.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. nudum. *Pappus* nullus. *Cal.* hemisphæricus, imbricatus: squamis marginalibus membranaceis.

Specific Character and Synonyms.

CHRYSANTHEMUM *indicum;* foliis simplicibus ovatis sinuatis angulatis serratis acutis. *Sp. Pl.* 1253. *Curt. Magaz.* 327.

CHRYSANTHEMUM *indicum;* foliis ovatis basi attenuatis trilobis dentatis, caule ramoso, ramis unifloris. *Willd. Sp. Pl.* 3. *p.* 2147.

CHRYSANTHEMUM *indicum;* foliis subpalmatis sinuato-lobatis dentatis stipulatis, caule ramoso, ramis unifloris, calycis squamis rotundatis. *Persoon Syn.* 2. *p.* 461.

CHRYSANTHEMUM purpureum. *Idem l. c.*

ANTHEMIS *artemisiæfolia;* foliis petiolatis sinuato pinnatifidis dentatis subtus incanis, caule fruticoso. *Willd. Sp. Pl.* 3. *p.* 2184. *Ejusdem Enum. p.* 911.

ANTHEMIS grandiflora. *Ramatuelle in Journ. d'Hist. nat .2. p.* 234.

ANTHEMIS stipulacea. *Mocnch Suppl. Meth. Pl.* 258.

MATRICARIA sinensis, Serune. *Rumph. Amb.* 5. *p.* 259. *t.* 91. *f.* 1.

TSJETTI-PU. *Hort. Malab.* 10. *p.* 87. *t.* 44.

At the time the purple CHRYSANTHEMUM *indicum* was published, no other variety was known in this country; but many have been since imported from China. For the following list of the varieties at present known in our gardens, as

as well for the communication of the specimen from which our drawing was taken, we are indebted to JOSEPH SABINE, Esq. of North Mimms.

(α.) Purple. *Bot. Mag.* 327.
(β.) Changeable white. *Bot. Mag.* 2042.
(γ.) Quilled white. *Bot. Reg.* 4.
(δ.) Tasseled white.
(ε.) Superb white.
(ζ.) Quilled yellow.
(η.) Sulphur yellow.
(ϱ.) Golden yellow. *Bot. Reg.* 4.
(ι.) Large lilac.
(κ.) Buff or orange.
(λ.) Rose or pink.
(μ.) Spanish brown.

WILLDENOW has supposed that the CHRYSANTHEMUM *indicum* of LINNÆUS is not the same species with our plant, but we see no reason to believe that they are distinct. The chaffy receptacle which is sometimes at least observed in our cultivated plants, has occasioned it to be ranked with ANTHEMIS, but the constancy of this character has not, we believe, been as yet ascertained.

Most of the above varieties seem to be permanent; but some of them, we are told, are liable to change their colour from change of soil and situation; and the one here figured has certainly this tendency, and owes the rich colour of the inner petals to its having been planted in a warm situation, where it was exposed to a very burning sun; and may therefore be expected, under different circumstances, to return again to its original white.

Since our present subject was drawn, and in the hands of the engraver, we received from Messrs. BARR and BROOKES, of the Northampton Nursery, a specimen of a newly imported white variety, which in size and form of the flower far surpasses any that we have before seen. It exceeded four inches in diameter, was extremely double and perfectly formed; the ligulæ quilled at the lower half, and spreading above; the petals towards the centre tinged of a lemon colour, shaded off to a pure white, and contrary to the usual mode, the points of the petals, except the outer rows, were curved inwards towards the centre. When fully expanded a few of the perfect florets of the disk were exposed to view, the bright yellow colour of which added to the beauty of the whole: this is the variety ε. in the above list.

N. 2043.

Ilex chinensis. Chinese Holly.

Class and Order.

Tetrandria Tetragynia.

Generic Character.

Cal. 4-dentatus. *Cor.* rotata. *Stylus* 0. *Bacca* 4-sperma.

Specific Character.

Ilex *chinensis;* foliis ovato-lanceolatis marginatis denticulatis: dentibus cartilagineis vix pungentibus, corymbis pedunculatis dichotomis.

Descr. An evergreen *shrub*, three feet high, but probably of much loftier growth. *Leaves* ovate-lanceolate, with a cartilaginous margin, upper ones quite entire, lower ones denticulate, especially toward the point: teeth, except a few at the point, not pungent; leaves reticulately veined, spotted with small dark dots which disappear in drying, midrib villous. *Peduncles* alternate, both axillary and extrafoliaceous, bearing small white flowers in compact dichotomous corymbs.

Our drawing was made at Messrs. Malcolm and Sweet's nursery, in July 1814, from a plant which we are informed by Mr. Sweet was imported from China.

N 2044

COTYLEDON CURVIFLORA. BENT-FLOWERED NAVELWORT.

Class and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-fidus. *Cor.* 1-petala. *Squamæ* nectariferæ 5, ad basin germinis. *Caps.* 5.

Specific Character.

COTYLEDON *curviflora ;* fruticosa, foliis semicylindricis sparsis, floribus paniculatis nutantibus, calycibus laxis, tubo corollæ pentagono incurvo.

COTYLEDON *purpurea ;* foliis lineari-oblongis carnosis glabris, floribus paniculatis. *Thunb. prodr.* 83 ?

The COTYLEDON *curviflora* appears to us to be an undescribed species, unless it should be THUNBERG's *purpurea*, which does not seem very probable, because neither the flowers nor leaves are of that colour. There is a species figured by BURMANN which has flowers not unlike those of our plant, but which are said to be erect, and the flowering stem is represented to be pubescent.

The stem is fleshy, rough with the vestiges of former leaves. From the extremities of the thick branches shoot straight, rounded, smooth, flowering stems, clothed with scattered fleshy, linear, semicylindrical leaves, and bearing a few flowered panicle at the extremity. The *peduncles* are twisted in a fantastical manner. *Calyx* large, lax, of five unequal fleshy leaflets. *Corolla* tubular, yellow, streaked with red : *tube* above an inch long, curved, somewhat inflated upwards,

upwards: *limb* not a third part the length of the tube, 5-cleft: laciniæ acute, reflexed but not rolled back. *Filaments* thickened at the base, villous. *Styles* longer than the stamens.

Communicated by Messrs. Whitley, Brames, and Milne, in October. Native of the Cape of Good-Hope, from whence it was brought two years ago by Mrs. Stuart, on her passage from the East-Indies.

N 2045.

TAGETES TENUIFOLIA. FINE-LEAVED TAGETES OR PERUVIAN MARYGOLD.

Class and Order.

SYNGENESIA SUPERFLUA.

Generic Character.

Recept. nudum. *Pappus* aristis 5, erectis. *Cal.* simplex, 1-phyllus, 5-dentatus, tubulosus. *Flosculi* radii 5, persistentes.

Specific Character and Synonyms.

TAGETES *tenuifolia;* foliis pinnatis, foliolis linearibus serratis, serraturis inferioribus elongatis, caule paniculato, pedunculis alternis unifloris, calycibus clavatis. *Willd. Sp. Pl.* 3. *p.* 2128. *Hort. Kew. ed. alt.* 5. *p.* 89.

TAGETES *tenuifolia;* caule ramoso, floribus patulis subcorymbosis, pedunculis foliosis. *Cav. ic.* 2. *p.* 54. *t.* 169.

DESCR. *Stem* branched, erect. *Leaves* opposite below, alternate above, pinnate, with leaflets very narrow, deeply dentate, mostly alternate. *Flowers* in a lax corymb. *Peduncles* one-flowered. *Calyx* simple, tubular, obovate, five-angled, five-toothed. *Radius* 5-flowered, *tube* filiform: *limb* 2-nerved, 3-toothed, folded back: *teeth* very obtuse: *Germen* rough: *pappus* paleaceous. *Tube* of the florets of the disk filiform: *limb* 4-cleft: *Receptacle* hemispherical, punctate. Taste of the leaves nauseous with a slight mixture of aromatic.

It appears by a specimen preserved in the Banksian herbarium, that this species was cultivated by Mr. WILLIAM MALCOLM in 1797, but being an annual and flowering late, it

was

was probably soon lost. Mr. LAMBERT raised it last year in his garden at Boyton, and sent us specimens of it late in October.

To procure ripe seeds, it should, like other tender annuals, be raised under a frame in the spring, and planted out late in May. From the delicacy of its foliage it is well suited for ornamental flower vases, as it lives well in water.

Arabis caucasica. Early-flowering Wall-Cress.

Class and Order.

Tetradynamia Siliquosa.

Generic Character.

Siliqua linearis stigmate subsessili coronata: valvis venosis vel nervosis. *Semina* uniseriata. *Cotyledones* accumbentes. *Cal.* erectus. Brown in Hort. Kew.

Specific Character and Synonym.

Arabis *caucasica;* foliis spathulato-oblongis canescentibus æqualiter grosse dentatis: caulinis sagittato-amplexicaulibus basi integerrimis. *Willd. Enum. Suppl. p.* 45.

This species is very nearly related to Arabis *alpina* (supra 225), but at the same time is sufficiently distinct, being altogether more canescent, cauline leaves sagittate at the base, and having only two, or rarely three, equal, coarse teeth, on each side towards the point, the rest of the leaf being quite entire. It flowers very early in the spring, and continues to blossom throughout the summer.

Communicated by Messrs. Whitley, Brames, and Milne, of the Fulham Nursery.

S. Curtis. Walworth. Feb. 1 1

N.2047.

CAMELLIA AXILLARIS. AXILLARY-FLOWERING CAMELLIA,

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Cal. imbricatus, polyphyllus : foliolis interioribus majoribus.

Specific Character and Synonyms.

CAMELLIA *axillaris ;* foliis obovato-oblongis serratis : superioribus integerrimis, floribus solitariis subsessilibus tetragynis.

CAMELLIA *axillaris ;* arborea, foliis oblongis acutis serrulatis, pedunculis axillaribus solitariis unifloris, calyce 5—6-phyllo villoso. *Roxb. fl. Ind. inedit.*

DESCR. *Flowers* solitary, axillary, in our specimen nearly terminal. *Calyx* of five leaves, obcordate, sphacelated at the tip, imbricate. *Corolla* five-petaled : *petals* obcordate, yellowish white, partly crumpled. *Stamens* very many, yellow : *filaments* unequal, connected at the base, falling off with, and holding the petals together : *anthers* ovate, versatile. *Germen* subglobular, four-celled : *style* erect, shorter than the longer stamens ; stigmas four, divaricate. Properly indeed there are four styles closely approximate but separable without tearing ! The *lower leaves* are serrate, the *upper* quite entire.

Whether the germen is constantly four-celled, we have not yet had an opportunity of ascertaining.

An evergreen shrub. Appears to be rather more impatient of cold than the other Camellias, but Mr. MILNE thinks it will succeed very well in a good conservatory.

Has been several years in the Fulham Nursery, and is supposed to have been brought from China by Mr. ROBARTS, and presented by him to Messrs. WHITLEY, BRAMES, and MILNE, with other CAMELLIAS. It flowered for the first time December last.

N.2048.

Pub.d by S. Curtis. Walworth Feb. 2.d 1806.

Wedde

GERARDIA PURPUREA. PURPLE GERARDIA.

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-fidus. *Cor.* 2-labiata: labio inf. 3-partito: lobis emarginatis: medio bi-partito. *Caps.* 3-locularis, dehiscens.

Specific Character and Synonyms.

GERARDIA *purpurea*; foliis linearibus integerrimis, floribus subsessilibus. *Hort. Kew. ed. alt.* 4. *p.* 6.
GERARDIA *purpurea*; foliis linearibus. *Sp. Pl.* 848. *Willd.* 3. *p.* 221. *Persoon Syn.* 2. *p.* 154. *Gron. Virg. ed. 4to.* 93.
GERARDIA purpurea. *Pursh Fl. Am. Sept. p.* 422. *Nuttall Gen. et Spec.* 2. *p.* 46. *Michaux Fl. Bor. Am.* 2. *p.* 19.
DIGITALIS foliis linearibus, floribus remotis. *Fl. Virg. ed.* 8*vo.* 169.
DIGITALIS virginiana rubra, foliis et facie Antirrhini vulgaris. *Pluk. Mant.* 65. *t.* 388.

Mr. NUTTALL has very properly remarked that the above generic character excludes the American species which approximate the genus DIGITALIS. The variety β of PURSH, Mr. NUTTALL describes as a distinct species under the name of *maritima*, and we are not sure that our plant, from its pubescent pale coloured corolla, does not belong to this.

GERARDIA *purpurea* seems to be rather a tender than hardy annual. Native of North-America, from Canada to the Southern States. There is a specimen collected in the former country, by Mr. FRANCIS MASSON, preserved in the Banksian Herbarium; and Mr. JOHN FRASER, to whom we are indebted for the communication of the plant from which our drawing

was

was taken, frequently met with it growing in low marshy situations from the state of Connecticut to South Carolina. Seeds collected in Canada would probably produce more hardy plants than those from a more southern climate.

Introduced to the Kew Garden in 1772, by Dr. Samuel Martin; but is very rarely met with in our collections; nor do we know of any figure of it having ever been given to the public, except the very imperfect one by Plukenet.

Flowered at Kew in July and August, but our plant did not blossom till October, too late to expect ripe seeds.

N.2049.

Ruscus Hypophyllum. Broad-leaved Butcher's-Broom.

Class and Order.

Diœcia Monadelphia.

Generic Character.

Masc. *Cal.* 6-phyllus. *Cor.* 0. *Nectarium* centrale, ovatum, apice perforatum.

Fem. *Cal. Cor.* et *Nectarium* Maris. *Styl.* 1. *Bacca* trilocularis. *Sem.* solitaria.

Specific Character and Synonyms.

Ruscus *Hypophyllum;* foliis subtus floriferis nudis. *Willd. Sp. Pl.* 4. *p.* 875. *Arb.* 329. *Hort. Cliff.* 465. *Fabric. Helmst.* 39. *Persoon Syn.* 2. *p.* 636. *Pallas Ross. p.* 89. *sine icone. Desfont. Atl.* 2. *p.* 374. *Hort. Kew.* 5. *p.* 420.

Laurus Alexandrina fructu folio insidente. *Bauh. Pin.* 305. *Blackw. Herb. t.* 194.

Laurus Alexandrina et Chamædaphne. *Column. Ecphr. pars.* 1. *p.* 164. *t.* 165. *f.* 1. *Park. theatr. p.* 700. *f.* 1. et 2.

Descr. *Branches* rounded, striate, becoming angular by drying. *Leaves* approaching to opposite, ovate, entire, seven-nerved, with fainter nerves between. *Stipules* leaf-like, ovate, half an inch long. *Flowers* aggregate from the middle of the leaf, not absolutely naked, having a small lanceolate marcescent and deciduous ligula at the base of the common peduncle; the peduncle is covered with small dry bractes. *Corolla* six cleft; three of the laciniæ broader, reflexed; three narrower, erect. *Column* of united *stamens* (*nectarium* of Linnæus) dark violet. *Stigma* globular, scarcely protruded beyond the stamens. There appeared to us to be at least some perfect *anthers,*

anthers, which is confirmed by the perfect maturity of the fruit upon a solitary plant. *Berry* spherical, three celled: each cell containing one seed completely filling its cavity.

By the older botanists Ruscus *Hypophyllum* and Ruscus *Hypoglossum*, were generally confounded, but they were well distinguished by the accurate figures of Fabius Columna.

Native of Italy and of Russia. Generally kept in the Greenhouse, where it flowers most part of the summer, bearing ripe fruit at the same time. Communicated by Mr. William Kent, of Clapton.

Pub. by S. Curtis. Walworth. March. 1. 1829.

Weddell. Sc

Bignonia venusta. Comely Trumpet-Flower.

****

Class and Order.

Didynamia Angiospermia.

Generic Character.

Cal. 5-fidus, cyathiformis. *Cor.* fauce campanulata, 5-fida, subtus ventricosa. *Siliqua* bilocularis. *Sem.* membranaceo-alata.

Specific Character and Synonyms.

Bignonia *venusta;* scandens, foliis ternatis, cirrhis diphyllis, foliolis ovatis acuminatis, pedunculis corymboso-racemosis terminalibus, calycibus integris denticulatis.

Bignonia *venusta,* scandens; foliis glabris, inferioribus ternatis ecirrhosis, superioribus conjugatis cirrhosis, foliolis, oblongo-ovatis acuminatis basi inæquilateri-obliquis, petiolis intus villosis; calyce brevi cylindrico-rotato æquali denticulis quinque teretibus villosis invicem distantibus, pedunculis corymboso-plurifloris. *Bot. Reg.* 249.

Bignonia spectabilis. *Vahl. Symb.* 3. *p.* 80 *?*

Descr. *Stem* climbing, fluted. *Leaves* opposite, ternate: leaflets ovate-acuminate, quite smooth. Towards the extremities of the branches the terminal leaflet is converted into a tendril, either simple or branched at the end. *Flowers* in terminal corymbose racemes, mostly drooping, lower pedicles opposite. *Calyx* very small in proportion to the flower, cup-shaped, entire at the margin, except five, small, villous, rounded teeth. *Corolla* tubular: *tube* two or three inches long, dilated and curved upwards: *limb* bilabiate, *upper lip* bifid, *lower lip* 3-cleft: laciniæ oblong, obtuse, with a villous margin.

margin. *Stamens* four, didynamous, inserted into the tube: the longer *filaments* nearly reach to the point of the laciniæ of the upper lip, the shorter ones to their base only. *Anthers* versatile, pendulous, being inserted into the filament near to one end: lobes distinct and finally diverging, bursting laterally the whole length. *Germen* linear, inserted into a fleshy cylindrical receptacle. *Style* nearly equal to the stamens: *stigma* lozenge-shaped, consisting of two plates, which before efflorescence diverge at the point, but are afterwards closely applied together.

We do not know that this very ornamental species of Bignonia has been any where described, except in the Botanical Register above quoted; but we are not without some suspicion that it may be the same, as the BIGNONIA *spectabilis* of VAHL, a native of the island of St. Croix in the West-Indies; for as that botanist had only dried specimens to describe from, he might easily be deceived in the colour of the flower, and the minute teeth of the calyx might escape notice: in other respects his description, as far as it goes, corresponds very well with our plant.

Native of the Brazils. Communicated by Mr. WILLIAM SMITH, who has the care of Lord LIVERPOOL's garden at Combe-Wood; he at the same time informed us, that the plant was sent from the Brazils to his Lordship by Sir JOHN BERESFORD in 1815: and that it flowered for the first time in 1817. He recommends it to be kept in the dry stove.

N. 2051.

Pub.by S.Curtis. Walworth. March 2 1819.

HELIANTHUS ANGUSTIFOLIUS. NARROW-LEAVED SUN-FLOWER.

Class and Order.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Generic Character.

Recept. paleaceum, planum. *Pappus* diphyllus. *Cal.* imbricatus, subsquarrosus.

Specific Character and Synonyms.

HELIANTHUS *angustifolius ;* caulibus gracilibus paucifloris, foliis alternis linearibus margine revolutis.

HELIANTHUS angustifolius. *Willd. Sp. Pl.* 3. *p.* 2244. *Hort. Kew. ed. alt.* 5. *p.* 129. *Pursh fl. amer. sept.* 2. *p.* 572. *Michaux fl. amer. bor.* 2. *p.* 141. *Persoon Syn.* 2. *p.* 476. *Meerb. ic.* 1. *t.* 49.

RUDBECKIA *angustifolia ;* foliis oppositis linearibus, integerrimis. *Sp. Pl.* 1281. *Willd.* 3. *p.* 2050. *Persoon Syn.* 2. *p.* 4770.

COREOPSIS foliis linearibus integerrimis. *Gron. Virg. ed.* 1. p. 181. *Mill. ic. t.* 224. *f.* 2.

FLOS SOLIS marianus, foliis alternis angustissimis scabris. *Petw. Mus.* 644.

DESCR. *Stem* two feet high, hispid. *Leaves* alternate, linear, with the margins rolled back, rough. *Peduncles* long, one-flowered, rough. *Calyx* squarrose; *leaflets* subequal, lanceolate, acuminate, hairy. *Receptacle* conical, paleaceous: paleæ embracing the florets. *Pappus* of two bristle-like paleæ. *Ray* deep yellow, very long in proportion to the brown-purple disk.

HELIANTHUS *angustifolius* and RUDBECKIA *angustifolia* appear to be the same species, one of them ought therefore to

to be expunged. We should have preferred uniting this plant to the latter; but both Pursh and the author of the Hortus Kewensis have arranged it with Helianthus.

Perennial; not very hardy. Native of Carolina. Flowers most part of the summer. Introduced in 1789 by Mr. Thomas Watson. Communicated by Mr. Anderson, from the Chelsea Garden, where it was raised from seeds sent by Mr. Nuttall in 1816.

N 2052.

BÆOBOTRYS INDICA. INDIAN BÆOBOTRYS.

****

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus. *Cor.* 1-petala. *Germ.* semi-inferum, 1-loculare, liberum, centrale. *Bacca* 1-locularis, polysperma.
Mæsa. FORSK.

Specific Character and Synonyms.

BÆOBOTRYS * *indica;* fruticosa, foliis petiolatis oblongo-ovatis acuminatis grosse serratis, racemis plerumque compositis axillaribus terminalibusque.
BÆOBOTRYS indica. *Roxb. Fl. indica inedit. Hort. Bengahl.*

The genus BÆOBOTRYS, established by FORSTER, was well described before by FORSKOHL in his Flora Ægyptiaca, under the name of MÆSA, constructed from its Arabic appellation *Maas.* The double calyx is properly omitted by ROXBURGH, being only two small bractes at the bottom of the calyx, which in our species are either wanting or are not both close to the calyx.

JUSSIEU places this genus in his natural order of *Ericæ,* but Mr. BROWN has properly arranged it under his *Myrsineæ* (the *Ophiosperma* of VENTENAT): he observes that it bears the same relation to this order, as SAMOLUS does to that of the *Primulaceæ;* having a germen semi-inferum, and in some species five barren filaments alternating with the segments of

---

* From Βαιος, little, and Βοτρυς, a bunch of grapes.

the

the corolla: these seem, however, to be wanting in our present plant, which, as far as we observed, has only the five fertile stamens opposite to the segments of the corolla, as in the generality of this order and the *Primulaceæ*. The tube of the corolla is bell-shaped, and the segments of the limb rolled back laterally, so as to give it the form of a Catherine wheel.

In the botanic garden at Calcutta, we are informed by Dr. Roxburgh, plants eight or ten years old grow into a small tree with a trunk the thickness of a man's thigh. The *berries*, according to the same author, are inferior, crowned with the persistent calyx, round, smooth, dry, the size of a grain of black pepper, one-celled, many-seeded, and without valves. The flowers are produced there in February, March, and April; in Mr. William Kent's stove at Clapton, to whom we are obliged for its communication, it flowered in November. Native of Chittagong.

Published by Sowerby, Walworth, March 1 1829.

Dracæna ferrea. Purple Dragon-tree.

Class and Order.

Hexandria Monogynia.

Generic Character.

Cor. 6-partita, erecta. *Filam.* medio subcrassiora. *Bacca* trilocularis, 1-sperma.

Specific Character and Synonyms.

Dracæna *ferrea*; arborea, foliis lanceolatis acutis. *Willd. Sp. Pl.* 2. *p.* 157. *Hort. Kew. ed. alt.* 2. *p.* 277. *Persoon Syn.* 1. 371.

Dracæna *terminalis*; herbacea, caulescens foliis lanceolatis. *Willd. Sp. Pl.* 2. *p.* 157. *Jacq. Collect.* 2. *p.* 354. *ic.* 2. *t.* 448. *Redouté liliac.* 91. *Persoon Syn.* 1. *p.* 372.

Asparagus *terminalis*; inermis, foliis alternis lanceolatis petiolatis, racemo terminali composito. *Sp. Pl.* 450.

Terminalis. *Rumph. Amb.* 4. *p.* 79. *t.* 34.

Descr. *Stem* arboreous, marked with rings, occasioned by the falling leaves, which continue growing from the extremity only. The *germen* is three-celled, with several ovula in each cell. The wood is said to become extremely hard, from whence it has acquired the name of Iron-wood.

Dracæna *ferrea* and *terminalis* were long considered as two distinct species, but are now regarded as the same.

Native of China. Introduced in 1771 by Benjamin Torin, Esq. Flowers in February, March, and April. Our specimen was communicated from the stove of John Walker, Esq. of Arno's Grove, Southgate, in February 1816.

Rosa arvensis, β. The Ayrshire Rose.

Class and Order.

Icosandria Polygynia.

Generic Character.

Petala 5. *Cal.* urceolatus, 5-fidus, carnosus, collo coarctatus. *Semina* plurima hispida calycis interiori lateri affixa.

Specific Character and Synonyms.

Rosa *arvensis*; fructibus globosis pedunculisque inermibus, aculeis caulinis petiolorumque aduncis, floribus subcymosis, stylis coadunatis. *Smith Compend. Flor. Brit. p.* 78. *Flor. Brit.* 2. *p.* 538.

Rosa arvensis. *Willd. Sp. Pl.* 2. *p.* 1066. *Hort. Kew.* 3. *p.* 259.

(β.) foliolis quinque, vix septem, calycis laciniis integris reflexis, ramis biorgyalibus.

Rosa *repens*; germinibus oblongis glabris, pedunculis hispido-glandulosis, petiolis villosis aculeatis, caule repente. *Willd. Enum.* 547? *Scop. Carn.* 610? *Jacq. Fragm. p.* 69. *t.* 104?

Desc. *Branches* four or five yards long when led over a trellis, and therefore well suited for covering arbours, smooth, but armed here and there with hooked prickles. *Leaves* generally consisting of five, sometimes only three, very rarely seven leaflets, which are ovate, acute, sharply serrate, the terminal one larger than the rest: *petiole* armed with a few curved prickles, otherwise smooth. *Stipules* semisagittate conjoined. *Flowers* in terminal corymbs. *Peduncles* covered with glandular hairs, with two or three lanceolate, entire, pellucid bractes at the base of each. *Germen* oval, smooth; segments of the calyx entire, awned, a little hairy. *Petals* white, obcordate.

In

In these characters we cannot find any thing to distinguish this plant from Rosa *arvensis*; the extraordinary length of the branches being probably solely owing to culture.

It has been known some years in our Nurseries, under the name of the Ayrshire Rose, but upon what grounds it has been so called is difficult to say, for upon the strictest enquiry, as we are informed by Sir Joseph Banks, no Rose of the kind could be heard of there or in any part of Scotland.

Flowers in June and July.

Communicated by the Right Honourable Sir Joseph Banks, Bart. from his garden at Spring-Grove.

GOODYERA DISCOLOR. PURPLE-LEAVED GOODYERA.

Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Cor. ringens: petalis exterioribus anticis *labello* inferne gibboso superne indiviso suppositis. *Columna* libera. *Pollen* angulatum. BROWN.

Specific Character and Synonyms.

GOODYERA *discolor*; foliis caulinis ovatis discoloribus subtus trinerviis, petiolis raginantibus, spica elongata, labello bilobo contorto.

GOODYERA discolor. *Lodd. Cabin.* 148.

The *stems* of this plant when they first spring from the root lie flat on the ground, and when coming into flower, rise suddenly into a straight scape furnished at the base with a few alternate oval leaves, of a dark purplish green on the upper side, and red purple on the under, with sheathing petioles. *Bractes* alternate, rusty-red, canoe-shaped, nearly the length of the flower. *Germen* white, striate, villous, twisted. *Petals* lanceolate, white, two lateral, spreading wing-like, three erect, adhering together at their points, looking like one hooded petal. *Column* erect, free, shaped at the top like a bird's head, of a yellow colour, the operculated two-celled anther forming the beak. *Labellum* or *Nectary* clawed, limb two lobed: *lobes* divaricate, twisted; under the claw of the nectary is a small purselike gibbosity.

Said by Mr. LODDIGES in his Botanical Cabinet to be a native of Rio Janeiro. Flowers in November, December, and January. Communicated by Messrs. BARR and BROOKE, of the Northampton Nursery, Newington Green.

N.2056.

ANARRHINUM BELLIDIFOLIUM. DAISY-LEAVED ANARRHINUM.

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-phyllus. *Corollæ* basis deorsum prominens, nectarifera : labium inferius planum palato destitutum : faux pervia. *Caps.* 2-locularis, multivalvis.

Specific Character and Synonyms.

ANARRHINUM *bellidifolium ;* foliis radicalibus obovato-lanceolatis obtusis serratis : caulinis partitis integerrimis. *Willd. Sp. Pl.* 3. *p.* 260. *Hort. Kew. ed. alt.* 4. *p.* 19. *Persoon Syn.* 2. *p.* 159. *Lam. et Dec. Fl. Franç.* 3. *p.* 595.

ANTIRRHINUM *bellidifolium ;* foliis radicalibus lingulatis dentatis lineatis : caulinis partitis integerrimis. *Mant.* 417. *Vahl. Symb.* 2. *p.* 67. *Villars Dauph.* 2. *p.* 442.

ANTIRRHINUM foliis imis elliptico-lanceolatis acute dentatis, caulinis capillaribus trifidis. *Hall. Hist. n.* 342.

ANTIRRHINUM foliis radicalibus spathulatis, duplicato-serratis, caulinis digitatis, laciniis lanceolato-linearibus integerrimis, intermedia longiore. *Gouan Illustr. p.* 39.

LINARIA bellidis folio. *Bauh. Pin.* 212. *Prodr.* 106. *t.* 106.

LINARIA odorata. *Dod. Pempt.* 184. *Clus. Hisp.* 349. *Park. Parad.* 267. *f.* 3. *Ger. em.* 550. *f.* 2. *Lob. ic.* 422. *f.* 1.

LINARIÆ aliquatenus similis folio bellidis. *Bauh. Hist.* 3. *p.* 549. *f.* 2. *Raj. Hist.* 758. *n.* 32.

OSYRIS odorata purpurea. *Tabernæm. Kräuter Buch.* 1210. *f.* 3 *et* 4.

The genus ANARRHINUM was first distinguished from ANTIRRHINUM by DESFONTAINES, in his Flora Atlantica, and since

since adopted by Willdenow, Persoon, and other systematic writers. The older botanists were sensible that it did not perfectly accord with the genus Linaria, to which, however, with Clusius, they generally united it. Linnæus added it to his too extensive genus of Antirrhinum, in which he included Linaria and Orontium of former authors; but later botanists are now pretty generally agreed in again separating the former of these.

The only figure of our plant quoted in the Hortus Kewensis, is the very erroneous one of Dodonæus, which represents the corolla with a very long spur: Clusius, Lobel, Gerard, Parkinson, and Tabernæmontanus, all made use of the same block or copies of it; but Caspar Bauhin, in his Prodromus, and John Bauhin, in his Historia, have given original figures of our plant, and, although the latter is upon a very small scale, yet both are far better than that of Dodonæus.

Our observation accords with the description of most botanists, who attribute a minute recurved spur to the corolla, which both the Bauhins described as destitute of any.

It does not seem to have ever had any title to the epithet *odorata*, being quite scentless, as has been remarked by almost every author that has given any description of it since Clusius, who describes it as being a little sweet-scented (*aliquantulum odorata*) in warm climates, though scentless when cultivated in Germany and Holland.

A hardy annual, or at most biennial. Flowers from June to October. Communicated by Mr. William Anderson, from the Apothecaries Botanical Garden in Chelsea.

Our drawing was taken from a weak plant: it sometimes attains the height of two feet, and is much branched.

Pub. by S. Curtis. Walworth. April 1. 1819.

Weddell Sc

Reaumuria hypericoides. Hypericum-like Reaumuria.

Class and Order.

Polyandria Pentagynia.

Generic Character.

Cal. 5-phyllus. *Petala* 5. *Caps.* 5-locularis, 5-valvis, polysperma. *Sem.* lanata.

Specific Character and Synonyms.

Reaumuria *hypericoides ;* foliis ellipticis planis. *Willd. Sp. Pl.* 2. *p.* 1250. *Hort. Kew. ed. alt.* 3. *p.* 327. *Persoon Syn.* 2. *p.* 85. *Lamarck Illustr. gen. t.* 489. *f.* 2. *Encycl. Bot. v.* 6. *p.* 85.

Reaumuria *linifolia ;* foliis ovato-lanceolatis lineari-lanceolatisque, acutis, planiusculis ; petalis calyce multo longioribus. *Salisb. Parad. Lond.* 18.

Hypericum *alternifolium ;* floribus pentagynis, calycibus foliaceis, caule herbaceo, foliis ovatis alternis acutis. *Labillard. Pl. Syriæ Dec.* 2. *p.* 17. *t.* 10.

Descr. *Stem* suffruticose, the habit of the plant like a Salicornia. *Leaves* fleshy, narrow, tongue-shaped, covered with glandular dots ; when chewed they have a somewhat acid briny taste. The leaves grow closer together on the barren than on the flower-bearing branches. *Calyx* five-cleft : segments ovate-acuminate, much shorter than the petals, but surrounded at the base with several leaf-like bractes, as long as the petals. *Nectaries,* two ciliated scales at the base of the limb of each petal. *Filaments* purple, inserted below the germen : *anthers* blue, curved. *Germen* superior, globular, smooth, 5-celled, with many ovula attached to the bottom of the cell. *Styles* 5, purple : *stigmas* simple.

Native of Syria. Introduced about the year 1800, by John Bell, Esq. Flowers from May to August. Communicated by Messrs. Loddiges and Sons.

N. 2059

NYMPHÆA STELLATA, β. LARGER-FLOWERED STARRED WATER-LILY.

Class and Order.

POLYANDRIA MONOGYNIA.

Generic Character.

Cal. 4—5-phyllus, inferus. *Petala* plurima, germine sub staminibus inserta. *Bacca* multilocularis, polysperma.

Specific Character and Synonyms.

NYMPHÆA *stellata ;* foliis peltato-cordatis integerrimis subtus coloratis : lobis divaricatis, calyce tetraphyllo petalis acutis longiore.

NYMPHÆA *stellata ;* foliis peltatis integerrimis utrinque glabris. *Hort. Kew. ed. alt. v.* 3. *p.* 294.

NYMPHÆA *stellata ;* foliis subrotundis sinuatis subtus purpurascentibus, lobis divaricatis acutis, calyce tetraphyllo petalis acutis cæruleis longiore. *Bot. Repos.* 330.

NYMPHÆA *stellata ;* foliis cordatis integerrimis, lobis divaricatis acutis, calyce acuto tetraphyllo petalis acutis longiore. *Willd. Sp. Pl.* 2. *p.* 1153?

NYMPHÆA *stellata ;* foliis ovatis utrinque glabris, floribus cæruleis, calyce quadripartito, corolla octopetala, stigmate octo-radiato, staminibus subviginti ; apicibus antherarum foliaceis. *Roxb. Flor. Ind. inedit.*

CASTALIA *stellaris ;* folia laminis plus minus repandis, lobis falcato-acuminatis basi distinctis. Stigma 10-radiatum. *Salisb. in Annals of Bot.* 2. *p.* 72.

CITAMBEL. *Hort. Malab.* 11. *p.* 53. *t.* 27?

The plant figured in the Hortus Malabaricus, under the name of CITAMBEL, from which WILLDENOW took up his *stellata*, appears to be in many respects different from our present

present plant; we have nevertheless very little doubt but that the latter is a mere variety of the NYMPHÆA *stellata* of Hortus Kewensis and of the Botanist's Repository; as well as of ROXBURGH's Flora Indica, not yet published. It differs from NYMPHÆA *cærulea* (No. 552) in having smaller leaves, purple coloured on the under side, with their margins quite entire and divergent lobes; in the petals being fewer in number, sharper pointed, and of a paler blue; in having fewer stamens, and a stigma with fewer rays: though all these organs were more numerous in our plant than as described by Dr. ROXBURGH. The flowers are entirely destitute of the fragrance of *cærulea*.

Our drawing was made from a plant communicated by Mr. WILLIAM KENT, of Clapton, who informs us that he raised it from seeds he received from Mr. M^c^ NAB, of Edinburgh. It grows readily from seeds, and if kept in the cistern of the stove, blooms most part of the summer; but appears to be only annual. Native of the East-Indies. Introduced in 1803 by Mr. WILLIAM ANDERSON, now curator of the Botanic Garden at Chelsea.

N. 2050.

COREOPSIS FERULÆFOLIA. FENNEL-LEAVED COREOPSIS.

Class and Order.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Generic Character.

Recept. paleaceum. *Sem.* compressa, emarginata. *Pappus* bicornis. *Calyx* duplex, uterque polyphyllus.

Specific Character and Synonyms.

COREOPSIS *ferulæfolia ;* foliis bipinnatis, pinnulis lineari-lanceolatis, pinnularum costis latitudine pinnularum. *Willd. Sp. Pl.* 3. *p.* 2251. *Hort. Kew. ed. alt.* 5. *p.* 132. *Persoon Syn.* 2. *p.* 477. *Jacq. Hort. Schoenbr.* 3. *p.* 65. *t.* 373.

We received the specimens from which our drawing was taken of this handsome species of COREOPSIS from N. HODSON, Esq. of Bury St. Edmunds. It is scarcely hardy enough to bear our winters without protection, but if planted out early in the summer, it will produce its fine yellow flowers in the autumn, which will continue till the frost sets in. Native of Mexico. Introduced in 1799 by the Marchioness of BUTE.

N. 2060.

JUSTICIA SECUNDA. SIDE-FLOWERING JUSTICIA.

Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cal. simplex vel duplex. *Cor.* irregularis vel subregularis. *Caps.* 2-valvis, 2-locularis: dissepimentum valvis contrarium: retinaculis seminum uncinulatis.

Specific Character and Synonyms.

JUSTICIA *secunda*; racemis terminalibus compositis; racemulis secundis multifloris, bracteis setaceis, foliis ovato-oblongis attenuatis. *Vahl Enum.* 1. *p.* 133. *Hort. Kew. ed. alt.* 1. *p.* 37.

JUSTICIA *secunda*; racemis terminalibus compositis, racemulis secundis, foliis ovato-lanceolatis acuminatis. *Vahl Symbol.* 2. *p.* 7. *Willd. Sp. Pl.* 1. *p.* 91. *Persoon Syn.* 1. *p* 21. *n.* 43.

This species is very nearly allied to JUSTICIA *lucida* (No. 1014) from which however it differs in the leaves being thinner, more attenuated towards the point, less undulated and not shining; in the raceme of flowers being more compounded, less compact, the partial peduncles much longer, and the flowers on the branches, which are much paler, looking one way; in having the upper lip of the corolla not quite entire, but slightly emarginate, and the lower lip only obsoletely three-toothed.

Native of the West-Indies. Requires to be kept in the stove. Introduced in 1793, in His Majesty's Ship, Providence, by the late Admiral, then Captain, WILLIAM BLIGH. Flowers from October to February. Propagated readily by cuttings. Communicated by Messrs. WHITLEY, BRAMES, and MILNE, to whom it was given by ANTHONY HART, Esq. who introduced it from the island of St. Christopher, his native country. We received it also from Mr. VERE's garden.

We know of no previous representation of this species.

N 2061

HELICTERES ISORA. NUT-LEAVED SCREW-TREE.

Class and Order.

MONADELPHIA DODECANDRIA.

Generic Character.

Cal. tubulosus oblique 3—5-fidus. *Cor.* 5-petala. Germen longissime pedicellatum. Stylus subquinquefidus. *Caps.* 5, uniloculares, polyspermæ, spiraliter contortæ.

Specific Character and Synonyms.

HELICTERES *Isora*; decandra foliis ellipticis subcordatis dentato-serratis acuminatis scabris subtus tomentosis, floribus axillaribus, fructu contorto apice subulato. *Willd. Sp. Pl.* 3. *p.* 721. *Persoon Syn.* 2. *p.* 239.

HELICTERES *Isora*; foliis cordatis serratis, fructu composito contorto. *Sp. Pl.* 1366. *Hort. Cliff.* 433.

FRUCTUS REGIS. *Rumph. Amb.* 7. *p.* 32. *t.* 17. *f.* 1.

ISORA-MURRI. *Hort. Malab.* 6. *p.* 55. *t.* 30.

On comparing our plant with specimens from the East-Indies, it appears to us to agree exactly with them, and not with HELICTERES *jamaicensis*, for which species this plant has probably been taken, as it has, if we mistake not, been in our gardens before the publication of the last edition of the Hortus Kewensis, in which work HELICTERES *Isora* does not occur. The figure and description by Van Rhede, in the Hortus Malabaricus, also agrees well with our plant, but those quoted as representations both of *jamaicensis* and *baruensis* are very different, having the stipes or column supporting the fructification much longer and declined. The leaves of our plant very much resemble in form and substance those of the hazle-nut; when young they are tomentose on both sides, but old leaves lose their pubescence on the upper surface. The flowers are

of

of an orange-red colour; those of jamaicensis are described as being white, and are so represented both in Ehret's and Jacquin's figures. In a specimen, according perfectly with our plant, given us by Dr. Heyne, and brought by him from the East-Indies, the fruit has the subulate termination as described.

Our drawing was taken from a very small shrub, communicated in blossom in September 1818, by Mr. Jenkins, of Gloucester-Place, in the New-Road, who raised it from a cutting taken from an old plant five or six feet high, which was several years in the Comtesse De Vandes stove, at Bayswater, but has since unfortunately perished.

N2062.

Pub by S Curtis Walworth March 2 1819

SALMEA SCANDENS. CLIMBING SALMEA.

****

Class and Order.

SYNGENESIA POLYGAMIA ÆQUALIS.

Generic Character.

Calyx imbricatus. *Recept.* paleaceum, conicum. *Flosculi* tubulosi, hermaphroditi. *Semina* compressa, biaristata. *Aristæ* persistentes.

Specific Character and Synonyms.

SALMEA *scandens;* caule scandente lævi, foliis ovatis acuminatis integerrimis calicibus cylindricis. *Decand. Hort. Monspel. p.* 141.

SALMEA scandens. *Brown in Lin. Soc. Trans.* 12. *p.* 112.

BIDENS *scandens;* foliis oppositis ovatis acuminatis integerrimis, caule scandente fruticoso, floribus oppositis paniculatis. *Sp. Pl.* 1167. *Reich.* 3. 706. *Hort. Cliff.* 399.

BIDENS frutescens. *Mill. Dict. ed.* 7.

The BIDENS *scandens* of SWARTZ and *suffruticosus* of BROWN'S History of Jamaica, according to M. DECANDOLLE, belongs to a different species. SALMEA *scandens* has leaves quite entire, somewhat undulated, but not at all serrated at the margin.

Most of the true species of BIDENS are annual, and perhaps all of them herbaceous, differing entirely, not in habit only, but in many of the generic characters from our plant, which has an imbricated, not an equal calyx; a conicle, not a flat receptacle; a compressed, not a square, seed. SALMEA is a genus intermediate between BIDENS, MELANANTHERA, and EUPATORIUM, and is named by M. DECANDOLLE in honour of the Count of SALM-DYCK, the genus before assigned to him by CAVANILLES being the same as the SANSEVIERA of THUNBERG.

This plant, though possessing few attractions, having neither beauty nor fragrance to boast, yet never having been before

before figured, and not being very well understood, appeared to be entitled to a place in the Botanical Magazine.

Native of Vera Cruz and Carthagena, but perhaps not of Jamaica. Communicated by Messrs. WHITLEY, BRAMES, and MILNE, of the Fulham Nursery, where it is treated as a stove plant, and is remarkable for the rapidity of its growth. They received it from the Lady of the Right Honourable CHARLES LONG, of Bromley-Hill.

Weddell S.

PSORALEA MELILOTOIDES. MELILOT-LIKE PSORALEA.

****

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. longitudine leguminis. *Stam.* diadelpha. *Legumen* monospermum, subrostratum, evalve.

Specific Character and Synonyms.

PSORALEA *melilotoides;* herbacea, foliis ternatis: foliolis lanceolatis mucronatis, racemis terminalibus. *Ventenat Hort. Malm.* 94.

PSORALEA *melilotoides;* herbacea, parce minuteque pubescens: foliis lanceolatis-trifoliatis: spica oblonga; bracteis latis acuminatis: leguminibus abbreviato-rotundatis, nervoso-rugosissimis. *Michaux Fl. bor.-am.* 2. *p.* 58.

PSORALEA *melilotoides;* parce pubescens, foliis ternatis: foliolis lanceolatis, spicis oblongis, bracteis lato-cordatis longissime acuminatis, leguminibus rotundatis nervoso rugosissimis. *Pursh Fl. Amer. Sept.* 2. *p.* 475.

PSORALEA *Melilotus;* pubescens, foliis ternatis lanceolatis, spica oblonga, bracteis latis acuminatis, leguminibus subrotundis rugosis. *Persoon Syn.* 2. *p.* 347.

TRIFOLIUM *psoralioides;* spicis ovatis bracteatis imbricatis, bracteis cordatis cum acumine flores cæruleos per paria tegentibus, leguminibus rotundatis. *Walter Fl. Carol. p.* 184.

MELILOTUS psoraloides. *Nuttall Plant. Amer.* 2. *p.* 104.

MELILOTUS flore violaceo, odore remisso. *Clayt. Virg. n.* 103. *ex Pursh.*

This plant is said to be an herbaceous perennial, but has the appearance of a pretty little upright shrub. *Branches* dichotomous, roughish. *Leaves* ternate, almost sessile: *leaflets*

leaflets lanceolate, pointed, the lateral on short footstalks, the middle one on longer. *Stipules* intrafoliaceous, lanceolate, erect, pressed close to the stalk. *Peduncles* very long, four-sided, terminal. *Spikes* ovate, lengthening as the flowers open. *Bractes* ovate acuminate, ciliated, deciduous. Tube of the *calyx* almost globular, 5-toothed: lower tooth longest. *Corolla*, as well as the bractes, of a pale violet colour: the vexillum and alæ nearly equal: carina shorter by half, two petaled, dark purple. *Legumen* one-seeded.

Mr. NUTTALL, chiefly on account of the absence of glands and the small size of the carina, refers this to TOURNEFORT's genus MELILOTUS; but as it has as many of the characters of PSORALEA, and may, as Mr. NUTTALL allows, be considered as a connecting link between the two genera, we rather retain it in the latter genus, to which it has already been referred by MICHAUX, PERSOON, and VENTENAT.

It does not appear that this very rare plant has ever been known in our gardens till introduced by Mr. JOHN FRASER, of Sloane-Square, to whom we are indebted for an opportunity of giving a drawing of it, as it is not to be found in the catalogues of the Kew or Cambridge gardens, nor in Mr. SWEET's excellent Hortus Suburbanus.

Native of North America, from Carolina to Florida, also of the open forests of Ohio, Kentucky, and Tennessee. Is not sufficiently hardy to bear our winters unprotected. Flowers in August, and continues long in blossom.

LESSERTIA PULCHRA. COMTESSE DE VANDES' LESSERTIA.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. semi-5-fidus. *Vexillum* explanatum. *Carina* obtusa. *Stigma* capitatum. *Stylus* antice barba transversa apicis, postice imberbis. *Legumen* scariosum, evalve (compressum vel inflatum). BROWN in Hort. Kew.

Specific Character.

LESSERTIA *pulchra ;* foliis septemjugis : foliolis ovatis acutis glabriusculis, racemis axillaribus subcapitatis secundis, pedicellis nutantibus.

DESCR. *Stem* fruticose. *Leaves* odd-pinnate ; alternate, but approximating by pairs : *leaflets* generally seven pair, with an odd one, ovate, acute, or sometimes obtuse and even emarginate, minutely ciliate at the edge and along the midrib, otherwise smooth. *Stipules* ovate-lanceolate, erect, embracing the petiole. *Peduncle* longer than the leaf, axillary, solitary, bearing a subcapitate raceme, with flowers looking one way. *Pedicels* curved, with a small lanceolate bracte at the base of each. *Calyx* campanulate, covered with black hairs, with five equal teeth. *Vexillum* spreading, deeply emarginate, pale red, streaked with bright red veins. *Alæ* and *carinæ* nearly the same length, the latter tipped with dark purple.

Native of the Cape of Good-Hope. Raised at the garden of the Comtesse DE VANDES, at Bayswater, from seeds received from the Cape, under the name of COLUTEA *fisiulosa* (the LESSERTIA *perennans* of DE CANDOLLE'S Astragalogia and Hortus Kewensis) from which species it is very different ; nor

can

can we find that it has been described by any author. There is a specimen from the Cape, preserved in the Banksian Herbarium, under the name of COLUTEA *pulchella*, which, if not the same, is certainly a very nearly allied species, but in that the habit is more lax, seeming to be rather herbaceous than shrubby, on which account we have avoided adopting exactly the same name.

Not having had any opportunity of examining the seed-vessel, and having neglected making any memorandum of the style and stigma, we are not sure that this plant is properly a LESSERTIA, and being certainly shrubby, we felt inclined to arrange it under SWAINSONA; but as it is a native of the South of Africa, and agrees in stipulation with LESSERTIA, we have thought it safest to add it to that genus.

Flowers in May, and requires the protection of the greenhouse in Winter.

PROTEA ACAULIS. STEMLESS PROTEA.

****

Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Petala 4, quorum 3 superne cohærentia. *Antheræ* apicibus concavis corollæ immersæ. *Nux* supera, undique barbata, stylo persistente coronata. BROWN.

Specific Character and Synonyms.

PROTEA *acaulis ;* caulibus abbreviatis, ramis depressis, foliis obovato-oblongis marginatis venosis basi attenuatis, involucris hemisphæricis inclinatis : bracteis obtusis glabris, corollis muticis. *Brown in Lin. Soc. Trans.* 10. *p.* 89. *Hort. Kew. ed. alt.* 1. *p.* 192.

PROTEA *acaulis ;* foliis oblongis capituloque globoso glabris, caule decumbente brevissimo. *Thunb. Prodr.* 27. *Diss. n.* 49. *Willd. Sp. Pl.* 1. *p.* 529.

PROTEA *glaucophylla ;* caule decumbente ; foliis 3—5 pollices longis, spatulato-lanceolatis, mucronulatis, utrinque glaucis, lateribus recurvis : fasciculis nutantibus ; bracteis involucri grandibus, brevissime ciliatis. *Salisb. Parad. Lond.* 11.

LEUCADENDRON *acaulon ;* foliis lanceolatis, floribus subrotundis, caule suffruticoso unifloro. *Sp. Pl.* 135.

LEPIDOCARPODENDRON acaulon, foliis paucis latis, nervo et marginibus rubris ornatis, fructu parvo. *Boerh. Lugd.* 2. *p.* 191. *c. tabula.*

SCOLYMOCEPHALUS africanus lauri folio humilis et procumbens. *Raj. Hist.* 3. *lib.* 25. *p.* 9.

DESCR. *Stem* short, bent down. *Leaves* obovate-oblong, veined, rigid, margins cartilaginous and recurved. *Bractes* of the *Involucrum* imbricated, the inner ones longest, smooth except

except some villosity at the margins, yellowish, tipped with red. *Pappus* at the base of the germen reddish brown, chaffy and bristly. *Claw* of the distinct *petal* filiform, twisted: *limb* ovate acute, unarmed: *anther* a little shorter than the limb. *Style* subulate, incurved: *stigma* acute, retained a long time together with the anther in the embrace of the petals.

The colour of most of the Proteas, both in the leaves and flowers, is more or less tinged with red according as they are more or less exposed to sun and air.

This fine specimen of PROTEA *acaulis* was communicated by Messrs. BARR & BROOKES, from their extensive nursery at Newington-Green, near the end of May in 1818.

N2066.

PHYTEUMA BETONICIFOLIUM. BETONY-LEAVED RAMPION.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. rotata, 5-partita, laciniis linearibus. *Stigma* 2-,*s.* 3-fidum. *Caps.* 2-,*s.* 3-locularis, infera.

Specific Character and Synonyms.

PHYTEUMA *betonicifolium;* spica oblonga, foliis simpliciter crenatis: radicalibus lanceolato-cordatis, caulinis lanceolatis. *Willd. Sp. Pl.* 1. *p.* 922. *Persoon Syn.* 1. *p.* 194.

PHYTEUMA *betonicifolia;* foliis cordatis oblongis crenatis, spica oblonga. *Villars Delph.* 2. *p.* 518. *t.* 12. *f.* 3.

PHYTEUMA *scorzonerifolium;* spica elongata cylindrica, floribus inferioribus remotis, foliis lanceolatis crenatis: superioribus linearibus. *Willd. Enum* 215. *Villars Delphin.* 2. *p.* 519. *t.* 12. *f.* 2.

We were favoured with this plant by Mr. JENKINS, of the Botanical Nursery, Gloucester-place, New-Road, in July last, under the name of P. *scorzonerifolium*, but we cannot find any distinguishing characters between this and the *betonicifolium* of VILLARS, which latter name we prefer, as having been adopted by WILLDENOW in his Species Plantarum. For although this author has afterwards taken up *scorzonerifolium* also in his Enumeratio, with his characters of which our plant corresponds, except that the radical leaves are more or less cordate, while those on the lower part of the stem are lanceolate, and supported on very long footstalks. VILLARS describes *betonicifolium* as having its radical leaves cordate,

and

and *scorzonerifolium* as having all the leaves lanceolate; we consider both as mere accidental varieties. To the latter VILLARS applies as a synonym the PHYTEUMA *Scheuchzeri* of ALLIONI, a very distinct species of which we have before given a figure (No. 1797).

A hardy perennial. Native of the mountains of Dauphiny. Flowers in July.

DIANTHUS FRAGRANS. SWEET-SCENTED PINK.

****

Class and Order.

DECANDRIA DIGYNIA.

Generic Character.

Cal. cylindricus, 1 phyllus; basi squamis 4, *Petala* 5, unguiculata. *Caps.* cylindrica 1-locularis.

Specific Character and Synonyms.

DIANTHUS *fragrans;* caulibus subunifloris, foliis subulatis rigidis mucronulatis subcanaliculatis, calycibus acutis pungentibus, squamis ovatis acuminatis adpressis subsenis tubo ter brevioribus, petalis rotundatis tenuissime multifidis imberbibus.

DIANTHUS *fragrans;* foliis vix $\frac{1}{2}$ lineam latis, glaucis, linearibus attenuatis, integerrimis: calyce cylindraceo; bracteis 6, infra medium calycis, petalorum limbo profunde multifido, imberbi. *Salisb. in Parad. Lond.* 112.

DIANTHUS *squarrosus;* caulibus subunifloris, squamis calycinis ovatis acutis brevissimis, petalis multifidis, foliis subulatis canaliculatis rigidis brevibus recurvis. *Marsch. a Bieb. fl. taur. cauc.* 1. *p.* 331? *Centur.* 1. *t.* 23.

DESCR. Cespitose. *Flowering stems* assurgent, smooth, a span high, generally single flowered, with sometimes a second or third on short footstalks. *Leaves* on the flowering stem about four pair, shorter than the internodes, rigid, slightly channelled, mucronate, subpungent, smooth: on the barren decumbent stems much closer together and frequently recurved. *Tube* of *calyx* cylindrico-conical, with connivent, subulate, pungent teeth: *scales* ovate-acuminate, adpressed, three times shorter than tube: inner pair largest, four in number, besides the last pair of diminished leaves, frequently close to the calyx, and giving the appearance of six scales.

Petals

Petals white, rounded, overlapping one another, finely cut, recurved. *Stamens* exserted, shorter than the petals: *anthers* white, sagittate. *Germen* ovate, on a short stipes: *styles* the length of the stamens, recurved.

There is no doubt but that our plant is the same species as is figured under the name of *fragrans* in the Paradisus Londinensis; but we do not believe that it is a native of Austria, or the same with Clusius's plant, quoted as a synonym by Mr. Salisbury. It does not seem to us that Dianthus *squarrosus*, of the Flora taurico-caucasica, differs from our plant in any respect but what is occasioned by cultivation; in Marschall a Bieberstein's figure, in his Century of rare plants, the leaves are represented as shorter and more recurved, and the petals less rounded. Could we have been quite certain of the identity of our plant with *squarrosus*, we should have preserved that name, there being a different species described under the name of *fragrans* in the abovementioned Flora; especially as the right of priority is uncertain, both being published in the same year. In the cultivated plant, however, the name of *squarrosus* is not very applicable, being given, as we suppose, from the short, recurved, thickset leaves, on the barren stems, which in our plant are only partially recurved; they are also more distant and longer.

Native of Southern Russia. Flowers in June and July. Communicated by N. S. Hodson, Esq. of Bury St. Edmunds.

N2068

ŒNOTHERA GRANDIFLORA, β. PUBESCENT GREAT-FLOWERED ŒNOTHERA.

Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-fidus, tubulosus. *Petala* 4. *Caps.* 4-locularis, 4-valvis, cylindrica, infera. *Sem.* nuda.

Specific Character and Synonyms.

ŒNOTHERA *grandiflora ;* foliis ovato-lanceolatis, staminibus declinatis, caule fruticoso. *Hort. Kew. ed.* 1. 2. *p.* 2. *ed. altera.* 2. *p*: 341. *Willd. Sp. Pl.* 2. *p.* 306.

ŒNOTHERA *grandiflora ;* caule glabriusculo ramoso, foliis ovato-lanceolatis glabris, staminibus declinatis. *Pursh Flor. Am. Sept.* 1. *p.* 261.

(α.) *caule, foliis, germinibusque glabris.*

(β.) *caule et germinibus subpubescentibus, foliis calycibusque villosis.*

DESCR. *Stem* erect, branched towards the top, woody, slightly pubescent. *Lower leaves* ovate lanceolate, narrowed into a short petiole, crenate-dentate, villous : *upper ones* not narrowed towards the base, half-stem-embracing. *Flowers* very large, yellow, sweet-scented, smelling something like the Jonquil, but more delicate. *Tube* of the calyx villous, nearly twice the length of the sulcated germens. *Petals* crenate at the tip, not so much emarginated as represented in the figure, being, when fully expanded, more of a truncate than obcordate form. *Stamens* and *style* declined.

Except

Except in the slight pubescence of the stem, germen, and tube of the calyx, and the soft villous leaves, our plant differs in no respect from ŒNOTHERA *grandiflora*, of which therefore it must be considered as a mere variety.

Native of Carolina. Biennial, scarcely to be considered hardy, though so marked in the catalogues. Flowers in August. Communicated by Mr. WILLIAM KENT, of Clapton.

CIMICIFUGA CORDIFOLIA. HEART-LEAVED BUG-WORT.

Class and Order.

POLYANDRIA TETRAGYNIA.

Generic Character.

Cal. 4—5-phyllus. *Petala* 4—8. *Caps.* 1—5, seu plures, oblongæ, sutura laterali dehiscentes, polyspermæ. *Pursh.*

Specific Character and Synonyms.

CIMICIFUGA *cordifolia ;* foliis decomposito-biternatis, foliolis cordatis lobatis serrato-dentatis, racemis virgatim paniculatis elongatis, floribus di-pentagynis, germinibus glabris. *Pursh Fl. Amer. Sept. p.* 373.

CIMICIFUGA cordifolia. *Hort. Kew. Epit. add.*

CIMICIFUGA americana. *Michaux Fl. Bor. Amer.* 1. *p.* 316. *Nuttall Gen. Pl. Amer.* 2. *p.* 15.

CIMICIFUGA *cordifolia* is a large herbaceous perennial, distinguished from *racemosa* and *fœtida* by its triternate leaves, with broad lobate leaflets. It has the nauseous smell of its relatives, but, when in flower in a large garden, makes a handsome appearance.

Native of Carolina. Introduced in 1812 by Mr. FRASER, of Sloane-Square. Flowers in June and July. Communicated by Mr. WILLIAM KENT, who bought it of the late Mr. LYONS.

N 2010.

Pub. by S. Curtis Walworth. Jun. 1.1810

Celastrus cymosus. Compact-flowered Staff-Tree.

Class and Order.

Pentandria Monogynia.

Generic Character.

Cor. 5-petala, patens. *Caps.* 3-angularis, 3-locularis. *Sem.* calyptrata.

Specific Character and Synonyms.

Celastrus *cymosus;* spinis nudis, ramis subangulatis, foliis obovatis serrato-dentatis obtusis, cymis pedunculatis axillaribus (folio brevioribus). *Soland. Mss. apud Banks.*

Celastrus *buxifolius;* spinosus, ramis angulatis, foliis oblongis obtusis crenatis, paniculis axillaribus. *Thunb. Prodr.? nec Linnæi.*

A near relative of Celastrus *buxifolius,* but sufficiently distinct, having naked spines; flowers more numerous, in corymbs much more compact, and shorter than the leaves.

A pretty little greenhouse shrub; native of the Cape of Good Hope; communicated by Mr. Sweet, from the Stockwell Nursery, in July 1815.

N 2071.

Pub. by S. Curtis. Walworth. June 22 1809.

ANISOMELES MALABARICA. MALABAR ANISOMELES.

Class and Order.

DIDYNAMIA GYMNOSPERMIA.

Generic Character.

Cal. 5-fidus. *Cor.* labium superius abbreviatum, integrum; inferius trifidum, lacinia media biloba. *Stam.* exserta, approximata: *Antheræ breviorum* biloculares, lobis parallelis; *longiorum* dimidiatæ vel dissimiles. BROWN.

Specific Character and Synonyms.

ANISOMELES *malabarica;* tomentosa, subeglandulosa, caule incano, foliis lanceolatis subtus rugosis, verticillis multifloris, calycibus lanatis: dentibus subulatis tubum æquantibus. *Brown Mss.*

NEPETA *malabarica;* spicis verticillatis bracteis filiformibus, foliis lanceolatis inferne integerrimis. *Lin. Mant.* 566. *Willd. Sp. Pl.* 3. *p.* 57. *Persoon Syn.* 2. *p.* 116. exclusis ubique synonymis ex *Morison et Rheede.*

AJUGA *fruticosa,* caule fruticoso erecto ramoso tomentoso, foliis lato-lanceolatis serratis, antheris superioribus simplicibus: inferioribus didymis. *Roxb. Fl. Ind. Orient. ined.*

JAM RETTY PEMERETTI, *nativis.*

DESCR. *Stem* shrubby, covered with a white wool, square. *Leaves* opposite, ovate-lanceolate: lower ones subcordate, rugose underneath, tomentose, soft, whitish. *Flowers* verticillate; peduncles dichotomous. *Bractes* linear, wooly, obtuse. *Calyx* half-five-cleft: teeth subulate, equal in length to the tube. *Corolla* bilabiate: *upper lip* very small, arched, shorter than the stamens: *lower lip* very large, trifid: middle segment

segment two-lobed, pale purple, spotted at the base: lateral ones spreading, white. *Anthers* of the shorter stamens didymous: of the longer hemispherical, hairy, one-celled.

ANISOMELES is a genus established by Mr. BROWN in his Prodromus Floræ Novæ Hollandiæ, to which, both NEPETA *indica* and *malabarica* of LINNÆUS belong. Our plant is very similar to ANISOMELES *salviæfolia* of the former author, from which it is distinguished especially by the form of the calyx, the teeth of which in the New Holland plant are broad and scarcely half the length of the tube.

Native of Malabar and Coromandel, and is, as we are informed by Dr. ROXBURGH, esteemed a medicine of considerable virtue by the inhabitants. Communicated by Mr. WILLIAM KENT, of Clapton, in whose stove it flowered in July.

N.2072.

ARUM BULBIFERUM. BULB-BEARING ARUM.

****

Class and Order.

MONŒCIA POLYANDRIA.

Generic Character.

Spatha 1-phylla, cucullata. *Spadix* supra nudus, inferne femineus, medio stamineus.

Specific Character and Synonyms.

ARUM *bulbiferum ;* acaule; foliis decompositis bulbiferis, spadice oblongo-ovato spatha ovata obtusa venoso-striata breviore.

ARUM *bulbiferum ;* radice tuberosa, foliis decompositis bulbiferis, spatha cucullata spadice cylindrico longiore, nectariis nullis. *Roxb. Fl. Ind. orient. ined.*

Native of Bengal. Plentiful in the woods in the neighbourhood of Calcutta, flowering in May. Soon after the decay of the flowers the leaves make their appearance, and continue during the rainy season.

The flower was drawn in May 1813 ; the leaf some weeks after, in the stove of JAMES VERE, Esq. of Kensington-Gore.

T.2073.

SESELI DICHOTOMUM. DICHOTOMOUS MEADOW-SAXIFRAGE.

****

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Corollæ uniformes. *Involucr.* obsoletum. *Involucella* polyphylla s. multifida. Fructus ovatus, striatus.

Specific Character and Synonyms.

SESELI *dichotomum;* caule stricto geniculato, foliolis linearibus fasciculatis umbellis axillaribus subsessilibus, basi confluentibus, involucellis connato-monophyllis.

SESELI *dichotomum;* foliolis linearibus confertis basi confluentibus, vaginis truncatis, involucellis connato-monophyllis, ramis ramulisque suboppositis caule altioribus. *Marshall a Bieb. Fl. Taurico-Cauc.* 1. *p.* 235.

SESELI dichotomum. *Pall. Ind. taur.*

DESCR. *Stem* erect, fistulous, jointed. *Leaves,* radical and lower cauline, about three inches long, decompound: *leaflets* linear, collected in verticillate bundles, confluent at the base: *petioles* completely embracing the stem: upper ones bearing only a bundle of leaflets at the extremity, which serves as a sort of general involucre. *Umbels* axillary, subsessile, or on very short footstalks: *rays* 4—6: of unequal lengths: *partial umbels* globose, compact: *involucels* many-cleft, fleshy, acuminate, confluent at the base. *Floscules* white, uniform. *Petals* persistent, concave, terminated in a subulate, involute acumen: *stamens* exserted: *anthers* globular: *seeds* striate, inclosed in the calyx, and crowned with the persistent revolute stigmas.

We

We observed on the stem of this plant a few small globules of a gummy exudation, that smelt and tasted strongly of ammoniacum, a gum-resin much used in medicine, supposed to be the product of a species of HERACLEUM.

This very singular plant was raised by Messrs. LODDIGES and SONS, from seeds sent by the late Professor STEPHAN, of Moscow, about the year 1811, to whom we are obliged for the specimen from which we drew up the above description. We have since received this plant from different collections.

A hardy perennial. Flowers in September and October. Native of the chalk hills of Tauria, where it was discovered by the late Professor PALLAS.

N. 2074

LIMONIA ARBOREA. TREE LIMONIA.

****

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus. *Petala* 5. *Bacca* 3-locularis. *Sem.* solitaria.

Specific Character and Synonyms.

LIMONIA *arborea ;* inermis, foliis pinnatis bijugis: foliolis oblongis obsolete serratis. *Hort. Kew. ed. alt.* 3. *p.* 43.
LIMONIA arborea. *Roxb. Corom.* 1. *p.* 60. *t.* 85.

The LIMONIA *arborea* is very nearly allied to *L. pentaphylla,* and perhaps might with propriety be considered as a mere variety. In our plant some of the leaves were a little serrate at the edges, but many of them were quite entire. It produced terminal as well as axillary panicles, but the terminal one in our plant was accidentally damaged.

Native of the mountainous parts of the Circars in the East-Indies, where it grows into a moderate sized tree with a branching shadowy head. The flowers are admired for their sweet scent, and the birds are fond of the berries.

Flowers most part of the summer. Our plant was communicated by Messrs. BARR and BROOKES, in January last; but the petals never properly expanded. Requires to be kept in the stove. Introduced by the Right Hon. Sir JOSEPH BANKS, Bart.

N. 2075.

Pub. by S. Curtis. Walworth. June. 1. 1819.

PITTOSPORUM FERRUGINEUM. RUSTY-LEAVED PITTOSPORUM.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. deciduus. *Petala* 5, conniventia in tubum. *Caps.* 2—5-valvis, 2—5-locularis. *Sem.* tecta pulpa.

Specific Character.

PITTOSPORUM *ferrugineum;* foliis ellipticis acuminatis glabris, petiolis ferrugineo-tomentosis. *Hort. Kew. ed alt. 2. p. 27.*

DESCR. *Leaves* elliptical-acuminate, smooth, veined, shining on the upper surface, paler and a little villous on the under. *Petiole* four times shorter than the lamina, rusty-tomentose. *Flowers* white, slightly scented, in a terminal compound umbel. *Peduncles* rusty-tomentose: *pedicels* white. *Calyx* 5-cleft, spreading, greenish-white, shorter by half than the tube of the corolla. *Petals* 5, conniving into a tube, revolute at their points. *Stamens* 5, scarcely longer than the tube of the corolla: *anthers* oval, affixed by the back. *Germen* oval, clothed with rusty coloured hairs: *style* shorter than stamens: *stigma* capitate, green. In so small a germen we could not be certain of the structure, but it appeared to us to be one-celled, with a single ovulum in the centre; it might however be two-celled with a central receptacle.

Native of Guinea. Requires to be kept in the stove. Flowers in the winter months. Introduced before 1787 by the Right Honourable the Earl of TANKERVILLE. Communicated by Messrs. WHITLEY, BRAME, and MILNE.

We

We are quite certain that this is the PITTOSPORUM *ferrugineum* of the Hortus Kewensis, but it differs considerably in its habit from the other species of the genus, which are all extratropical productions; and if our observation respecting the germen is correct, which however we are not confident of, it can hardly be considered as a true PITTOSPORUM.

N 2076.

JUSTICIA EUSTACHIANA. ST. EUSTATIA JUSTICIA.

Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cal. simplex vel duplex. *Cor.* irregularis vel subregularis. *Caps.* 2-valvis, 2-locularis: dissepimentum valvis contrarium: retinaculis seminum uncinulatis.

Specific Character and Synonyms.

*** Calyce simplici, corollis bilabiatis, labiis divisis.

JUSTICIA *eustachiana*; fruticosa, foliis ovatis acuminatis subserratis, spicis brevibus subverticillatis, bracteis linear-lanceolatis, antheris parallelis unilocularibus!

JUSTICIA *eustachiana*, fruticosa, corollis bilabiatis divisis, foliis oblongis acuminatis, spicis axillaribus terminalibusque, verticillis remotis subbifloris, bracteis lanceolatis. *Bot. Reg.* 309. *ex schedis Solandri apud Banks.*

JUSTICIA *eustachiana*; dianthera; foliis lanceolato-oblongis, pedunculis multifloris, bracteis linearibus apice latiusculis acuminatis. *Jacq. Amer. p.* 4. *t.* 4?

JUSTICIA *eustachiana*; spicis axillaribus terminalibusque, floribus inferne geminis, superne solitariis, bracteis cuneatis. *Vahl Symb.* 2. *p.* 15? *Ejusdem Enum.* 1. *p.* 144?

DIANTHERA eustachiana. *Syst. Veget. ed.* 14. *p.* 64?

In so very extensive a genus, amounting in the late Professor VAHL's Enumeration to one hundred and forty-seven species, and to which number many more have been since added, it is not easy to find discriminating characters within the

the limits usually prescribed for a specific phrase. It is therefore no wonder that much difficulty should occur in ascertaining many of the species, without the aid of either figure or authentic specimen; for nothing can be determined by the figure given us by JACQUIN, who first established the species, and there does not appear to have been any specimen of it in his herbarium. We have reason to believe that our plant is the *eustachiana* of the Hortus Kewensis, and being figured under this name in the Botanical Register, we do not hesitate to adopt it, though we cannot but entertain doubts whether the species defined by VAHL be the same.

The opportunity afforded us of examining the herbarium of Sir JOSEPH BANKS has not produced the usual conviction in our minds. Dried specimens of many of the species of JUSTICIA are, from their difficult preservation, less satisfactory than usual; and from an examination of these, we should hesitate between *sphærosperma* and *eustachiana*, or perhaps should have been induced to have rather referred our plant to the former, but that Mr. BROWN had examined the *antheræ* of both, and thought that those of the latter agreed in being unilocular, whilst those of the other were bilocular.

Several species of JUSTICIA of VAHL have, chiefly from this character of unilocular anthers, been separated into a distinct genus by Mr. BROWN, in his Prodromus Floræ Novæ Hollandiæ, page 474, under the name of Hypoestes, which, as he observes, had been long before proposed by the late Dr. SOLANDER*: to this genus we suppose that the JUSTICIA *eustachiana* here figured must be referred. It should be observed, however; that both JACQUIN and VAHL refer their plant to the section of *Diantheræ*.

Our drawing was taken several years ago from a fine specimen that flowered in the month of April, in the stove of the late Right Hon. CHARLES GREVILLE, at Paddington. Mr. WHITLEY's plant, figured in the Botanical Register, blossomed in June; in the Hortus Kewensis, August and September are stated as its flowering months.

A straggling growing shrub; native of St. Eustatia and Martinico; propagated by cuttings; cultivated in the stove.

---

* See observations upon this proposed genus, by our friend Mr. KÖNIG, in Annals of Botany, vol. 1. p. 189.

N. 2077.

Pub. by S. Curtis. Walworth. June. 1. 1819.

Weddell Sc

LOBELIA MINIMA. LEAST LOBELIA.

****

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus. *Cor.* 1-petala, irregularis. ***Antheræ*** **cohærentes.** *Caps.* infera, 2- s. 3-locularis.

Specific Character.

LOBELIA *minima ;* caulibus prostratis, foliis ovatis crenatis petiolatis, pedunculis axillaribus unifloris longissimis, bracteis ternatis.

Though nearly related to it, this species cannot be the same with LOBELIA *minuta,* because the latter has no bractes, whilst our plant has three small subulate ones about the middle of the peduncle; nor can we venture to refer it to LOBELIA *Laurentia,* which is represented as being very similar to *minuta,* except in being furnished with one or two solitary, not ternate, bractes. The true LOBELIA *Laurentia* is a native of the South of Europe, and as figured by MICHELI, has very little resemblance to our *minima.*

Native of the Cape of Good-Hope. Communicated by Mr. COLVILLE, from his renowned nursery in the King's Road.

Propagated by parting its roots. Flowers in October.

HEDYCHIUM ANGUSTIFOLIUM. NARROW-LEAVED HEDYCHIUM.

Class and Order.

MONANDRIA MONOGYNIA.

Generic Character.

Anthera duplex. *Filam.* geniculatum extra antheram non elongatum. *Stylus* filamento duplo longior, filiformis, tenacissimus, in sulco antheræ receptus.

Specific Character and Synonyms.

HEDYCHIUM *angustifolium ;* foliis lanceolatis spica stricta, bracteis imbricatis convolutis multifloris, laciniis linearibus, stamine longissimo.

HEDYCHIUM angustifolium. *Bot. Reg.* 157. *Roxb. Fl. Ind. inedita Coromandel Plants,* 3. *t.* 251.

HEDYCHIUM coccineum. *Smith in Rees' Cyclopæd.?*

This is a very beautiful plant and also fragrant, though not altogether of so pleasing a scent as HEDYCHIUM *coronarium.* The flowers, when first expanded, are of a delicate light buff, inimitable by art, which changes to a red orange, but hardly to a scarlet colour ; except the stamen. We suspect it to be the variety of *coccineum* mentioned by Dr. BUCHANAN, which Sir JAMES E. SMITH is inclined to think may be a distinct species.

Native of the eastern parts of Bengal, and, if the same with Dr. BUCHANAN's plant, of Upper Nepal also. With us it is the inhabitant of the stove, where it is very ornamental. Flowers the latter end of the year. Communicated from the collection of JAMES VERE, Esq. by Mr. BLAKE, his gardener, in November last year.

N 2079

ANEMONE PALMATA, γ. ALBIDA. PALE-FLOWERED CYCLAMEN-LEAVED ANEMONE.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 0. *Petala* 6—9. *Sem.* plura.

Specific Character and Synonyms.

Sect. Anemonoides.

ANEMONE *palmata ;* foliis reniformibus sublobatis crenatis, petalis obtusis : exterioribus villosis.

ANEMONE *palmata ;* foliis cordatis trilobis, involucris triphyllis trifidis, corollis subdecapetalis. *Vahl Symb.* 3. *p.* 73. *Willd. Sp. Pl.* 2. *p.* 1277. *Persoon Syn.* 2. *p.* 97. *Hort. Kew. ed. alt.* 3. *p.* 338. *Bot. Reg.* 200.

ANEMONE *palmata ;* foliis cordatis sublobatis, calyce hexaphyllo colorato. *Lin. Sp. Pl.* 758.

ANEMONE *palmata ;* foliis rotundatis lobatis crenatis, involucro multifido, petalis exterioribus villosis majoribus. *Desf. atl.* 1. *p.* 432.

ANEMONE *palmata ;* foliis cordatis suborbiculatis obtuse 3—5-lobis dentatis, involucralibus sessilibus trifidis, sepalis 10—12 oblongis obtusis. *De Cand. Regn. veg.* 1. *p.* 199.

ANEMONE palmata. *Bot. Repos.* 172. *Brot. Fl. lusit.* 2. *p.* 361. *De Cand. Fl. franç.* 5. *p.* 635.

ANEMONE cyclaminis seu malvæ folio lutea. *Bauh. Pin.* 173. *Moris. Hist.* 2. *p.* 425. *s.* 4. *t.* 25. *Ray Hist.* 1. *p.* 626.

ANEMONE hortensis latifolia simplici flavo flore. *Clus. Hist.* 1. *p.* 249. *f.* 1.

ANEMONE latifolia Clusii. *Ger. emac.* 376. *f.* 6. *Dalech. lugd.* 846. *f.* 2. *Tabern. ic.* 26. *Lob. ic.* 279. *f.* 2. *Bauh. Hist.* 3. *p.* 401. *f.* 1. *Barr. ic.* 792.

ORIBA. *Adans. fam.* 459.
(β.) flore pleno.
ANEMONE hortensis latifolia, flore flavo duplicato. *Hort. Eyst. ord. vern.* 1. *t.* 18. *fig.* 4. *Clus. Hist.* 1. *p.* 249. *f.* 2.
(γ.) minor, glabrior, flore albido.
ANEMONE palmata. *Bot. Repos.* 172. *Heic. No.* 2079.

This plant is in all its parts so much smaller and smoother than the variety figured in the Botanical Register, as well as so differently coloured both in the flowers and foliage, as to lead to a doubt whether it may not be a distinct species. The leaves of our plant are less distinctly lobed, very slightly villous, and of a deep violet colour on the under side, the flowers on the inside only faintly tinged with yellow; segments of the involucrum much narrower, and with the scape smooth, except that the latter was clothed towards the top with a slight bronze-coloured villosity.

The variety figured in the Botanist's Repository appears to be the same as ours *.

M. DE CANDOLLE is doubtful whether the double variety mentioned by authors belongs to this species or to *stellata*, but an inspection of CLUSIUS's figure, and more especially that in the Hortus Eystettensis, leaves no doubt in our minds.

Native of Portugal, Spain, Provence, and Barbary. Flowers with us in April. Is too tender to succeed well without protection from frost. Communicated by N. S. HODSON, Esq. of Bury St. Edmunds.

---

* LINNÆUS, in his Species Plantarum, placed ANEMONE *palmata* next to *Hepatica*, and considered it as uniting ANEMONE and HEPATICA of TOURNEFORT into one genus; he afterwards however removed it into another section, along with *coronaria* and *hortensis*, to which it is undoubtedly more nearly related. But when VAHL says that he cannot perceive what LINNÆUS meant "per calycem hexaphyllum coloratum a flore remotum", he appears to have puzzled himself by the omission of the word *nec*; LINNÆUS says, " nec a flore remotus", by which he meant to distinguish it from the Involucrum. That the outer petals have at least some resemblance to a calyx is confirmed by DESFONTAINES, who observes, that the outer petals are larger and villous " calycem mentientes."

N.2080.

Pub. by S. Curtis. Walworth Jun. 1st 1819.

Waddell Sc

Camellia Sasanqua β. Palmer's Double Sasanqua.

Class and Order.

Monadelphia Polyandria.

Generic Character.

Cal. imbricatus, polyphyllus : foliolis interioribus majoribus.

Specific Character and Synonyms.

Camellia *Sasanqua ;* foliis obtuse serratis, floribus terminalibus subsolitariis, petalis obcordatis.

Camellia *Sasanqua ;* foliis obtuse serratis (petalis) emarginatis. *Thunb. Jap.* 273. *t.* 30. *Willd. Sp. Pl.* 3. *p.* 842. *Hort. Kew. ed. alt.* 4. *p.* 235. *Poiret Encycl. Bot. Suppl.* 2. *p.* 48.

(α.) flore rubro simplici.

Sasanqua. *Kæmpf. Am. Exot.* 853.

(β.) flore incarnato multiplici. *Heic. No.* 2080.

(γ.) flore albo simplici.

Camellia Sasanqua. *Thunb. l. c. Bot. Reg.* 12. *Staunton Embassy to China.* 2. *p.* 466. cum figura.

It appears to us that this beautiful shrub must be a variety of Camellia *Sasanqua,* not of C. *japonica.* Its foliage is thinner ; flowers much smaller, and more constantly terminal ; outer petals wider at the end, often obcordate or emarginate. Kæmpfer's Sasanqua is described by him as having red flowers : Thunberg says nothing of any red flowered variety, but describes them as white ; in our plant they were of a delicate blush colour. We suspect that in Thunberg's specific character there is an accidental omission of the word petalis, as he describes these, but not the leaves, as being emarginate ; and in his figure, as well as in a specimen from himself in the Banksian Herbarium, the leaves are all pointed, as in our figure, though somewhat more obtusely so.

Our

Our drawing, as well as a living specimen of the blossom and foliage, was kindly communicated by Mrs. T. Palmer, of Bromley, in Kent, in whose greenhouse the original flowered last Spring. It was brought from China by Captain Rawes, together with several other curious and rare plants.

J 2087

PULTENÆA RETUSA. OBTUSE-LEAVED PULTENÆA.

****

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus, labiis proportionatis, bibracteatus (bracteis sæpius ipso tubo insidentibus). *Cor.* papilionacea. *Germen* sessile, dispermum. *Stylus* subulatus, adscendens. *Stigma* simplex. *Strophiola* seminis lobis posticis incisis. BROWN.

Specific Character and Synonyms.

PULTENÆA *retusa ;* capitulis terminalibus, foliis linearibus retusis muticis planis glabris, bracteis calyce paulo longioribus. *Hort. Kew. ed. alt.* 3. *p.* 18.

PULTENÆA *retusa ;* foliis linearibus retusis muticis glabris, stipulis geminis minutis, bracteis ovatis vix longitudine pedunculorum. *Smith in Ann. of Bot.* 1. *p.* 502 & *Lin. Trans.* 9. *p.* 247.

Papilionaceous flowers have mostly ten stamens, but sometimes all the filaments are united together into one membranaceous sheath ; more generally nine of the filaments are united, and one remains distinct. These last gave rise to LINNÆUS's class of the Diadelphia, from which, however, he did not separate the former. But a third set having the filaments distinct to their base, were necessarily arranged in his system under Decandria. Of this last division, few plants were known to LINNÆUS, and the genus SOPHORA, for a considerable time, almost served as a common receptacle for all such. But the prodigious number of decandrous papilionaceous plants, discovered in New Holland, soon induced the necessity of establishing

establishing new genera; in doing which, Sir James Edward Smith led the way by describing several in his specimen of the Botany of New-Holland, in the first volume of the Annals of Botany, and in the fourth and ninth volumes of the Transactions of the Linnean Society. To these genera, all of which have been adopted by succeeding botanists, Mr. Robert Brown, (who, from his residence in that country and his situation since his return, has had the greatest opportunities of studying these plants) has added several more.

Pultenæa *retusa* was among the first plants from the settlement of New South Wales cultivated in our gardens, the date of its introduction, by Sir Joseph Banks, being in the year 1789; yet no figure of it has, that we know of, been hitherto published.

It may be necessary in order to reconcile the seeming contradiction in the characters given of this plant by the two celebrated botanists above quoted to observe, that what Brown calls bractes, are considered by Smith as appendixes of the calyx, and his bractes, which in this species are minute scales, are situated upon, or more generally at the base of, the peduncle.

Our drawing was taken several years ago from a plant communicated by Messrs. Loddiges and Sons. Propagated by cuttings or seeds. Flowers in April and May. Requires to be protected from frost.

VIBURNUM RUGOSUM. CANARY LAURESTINE.

Class and Order.

PENTANDRIA TRIGYNIA.

Generic Character.

Cal. 5-partitus, superus. *Cor.* 5-fida. *Bacca* 1-sperma.

Specific Character and Synonyms.

VIBURNUM *rugosum*; foliis lato-ovatis rugosis subtus hirtis, involucro universali heptaphyllo. *Persoon Syn.* 1. *p.* 326. *Bot. Reg.* 376.

VIBURNUM *Tinus* β. (strictum) foliis ovatis undique hirtis rigidis. *Hort. Kew. ed. alt.* 2. *p.* 167.

It is justly remarked in the Botanical Register, that PERSOON has wrongly quoted the variety α. *hirta* of the Hortus Kewensis as a synonym of this plant instead of β. *stricta*, as is proved by the specimens in the Banksian Herbarium, without the aid of which it would not have been easy to decide, and PERSOON has himself marked his quotation as dubious. VIBURNUM *rugosum* is a more robust growing plant than any of the true varieties of *Tinus*, and has larger, harsher, and more hairy leaves.

It is also more tender, and is usually and we believe properly, treated as a greenhouse shrub. The flowers are white both within and without, but the stigma being of a bright rose colour give them a lively appearance.

Native of the Canaries. Introduced by Mr. MASSON in 1778. Our drawing was taken from a plant communicated by Messrs. BARR and BROOKE, of the Northampton nursery.

Curtis Del.

Pub.by S Curtis . Walworth . July 2 1814

Watts Sc.

GLYCINE SINENSIS. CHINESE GLYCINE.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 2-labiatus. *Corollæ* carina apice vexillum reflectens.

Specific Character.

GLYCINE *sinensis*; caule frutescente volubili, foliis imparipinnatis: foliolis ovatis acuminatis pubescentibus, racemis terminalibus ebracteatis multifloris.

DESCR. *Stem* climbing, shrubby. *Leaves* odd-pinnate; common petiole swelled at the base: *leaflets* usually eleven, ovate, acuminate, in opposite distant pairs, clothed on both sides with a thin silky adpressed pubescence, scarcely visible to the naked eye. *Stipules* subulate at the base of the partial footstalks. *Racemes* terminal, many-flowered, pendulous; *bractes*, if any, very deciduous. *Pedicles* longer than the calyx, villous. *Calyx* villous, campanulate, two-lipped: *upper-lip* short, emarginate: *under-lip* three-toothed, middle one longest. Flowers papilionaceous, large, shewy. *Vexillum* orbicular, large, reflexed. *Alæ* long and wide, joined together at the apex, applied close to the *carina*, which is broader than them. *Stamens* diadelphous $\frac{1}{9}$. *Germen* linear, ciliated its whole length along the upper edge: *Style* quite smooth: *Stigma* globular.

Having had no opportunity of seeing the Legumen, it is hardly possible to ascertain the genus to which this plant belongs, but it approaches so near to GLYCINE *frutescens* of LINNÆUS, that we are pretty certain that it must belong to the same genus; which is not however a proper GLYCINE, and has even been separated from APIOS by Mr. NUTTALL under the

the name of WISTERIA. These plants agree in habit, in the form, number, position, and pubescence of the leaflets; in the swollen base of the petiole; in the terminal many-flowered racemes; in the shape of the vexillum; and the connexion of the alæ at the point.

Our plant differs from GLYCINE *frutescens* in the greater length of the raceme; the larger size and deeper violet colour of the flowers; in the longer pedicels; and in the want of or more deciduous nature of the bractes; in the tube of the calyx being much shorter; in the hairiness of the germen; but scarcely in any other respect that we can discover.

We prefer retaining it under the name of GLYCINE at present, (though neither this, G. *frutescens*, nor G. *Apios*, at all correspond with the generic character) as till the legumen shall have been examined, it must be uncertain where it ought to be arranged.

The specimen of this beautiful climber, from which our drawing was taken, was communicated through our friend, ALEXANDER M'LEAY, Esq. from the collection of CHARLES HAMPDEN TURNER, Esq. at Rooksnest-Park, near Godstone in Surry. The plant was brought from China three years ago by Captain WELBANK; and we are informed by his gardener, Mr. D. M'LEOD, was at first kept in the peach-house, heated to 84°, where it was nearly destroyed by the red spider. On the heat being reduced to below 60°, the plant was more vigorous, but still weakly. Early in August the gardener removed it from the wall of the peach-house, set it in a pot of vegetable mould, and tied the branches to a stick. In the month of September it lost all its leaves. It was kept all the winter on the floor, in the coldest and darkest part of the greenhouse; in which situation the mould in the pot was frozen three different times during the winter. In the begining of March it shewed flower-buds, and the plant was removed to a more favourable situation in the house; but no leaves were put forth till the last week in March, when the flowers were nearly expanded. The gardener has propagated it both by layers and cuttings, and proposes to try how far it will bear the cold of our climate.

ERICA FASTIGIATA. WALKER'S HEATH.

Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-phyllus. *Cor.* persistens: limbo 4-fido. *Antheræ* ante anthesin per foramina duo lateralia connexæ. *Caps.* 4—8-locularis, 4—8-valvis.

Specific Character and Synonyms.

ERICA *fastigiata*; antheris muticis, floribus subsessilibus terminalibus quaternis, bracteis calyci proximis, foliis patentibus quaternis.

ERICA fastigiata, α. *Hort. Kew. ed. alt.* 2. *p.* 395.

ERICA *fastigiata*; antheris muticis inclusis, corollis hypocrateriformibus fasciculatis, stylo incluso, foliis quaternis. *Syst. Veg. ed.* 14. *p.* 368. *Mant.* 66. *Burm. Prodr.* 11. *Reichard Syst. Pl.* 2. *p.* 183. *Persoon Syn.* 1. *p.* 428.

ERICA Walkeria. *Andrews's Heaths, Vol.* 1.

ERICA mundula. *Lodd. Bot. Cab.*

There is not a little difficulty in settling the species of this very extensive genus. Our present plant was called, by ANDREWS, ERICA *Walkeria*, but was ascertained by the late Mr. DRYANDER to be the *fastigiata* of LINNÆUS. We have before given our reasons for considering E. *primuloides*, which this excellent botanist made the variety β of *fastigiata*, as a distinct species, and we still think these reasons sufficient.

---

* The Plate is, by mistake, numbered 2080.

ERICA

Erica *fastigiata* is an upright small *shrub*, with erect branches; *leaves* growing by fours, scarcely half an inch long, and spreading. The *flowers* are sessile, and grow by fours at the extremities of the branches. *Calyx* consists of four subulate *leaflets*, not above half the length of the tube of the corolla; close to these are three *bractes*, equal in length and similar to them, so that the calyx appears to consist of seven leaflets. *Tube* of the corolla a little inflated at the base only, being nearly cylindrical upwards, of a greenish white colour: the *border* is four-cleft; *laciniæ* spreading, flat, oval, white on the interior surface, the exterior more or less tinged with red. *Anthers* unarmed, included, dark purple. *Stigma* lobular, just appearing above the tube.

Andrews has figured two other heaths as varieties of this, which he calls Erica *Walkeria* rubra and alba; both of which appear to us to be distinct from, but the Erica *mundula* of Loddiges' Botanical Cabinet is undoubtedly the same with, our plant.

Native of the Cape of Good Hope. Introduced by Mr. Masson in 1792. Flowers from February to June. Communicated by Messrs. Loddiges and Sons.

N.2085.

CANNA LUTEA. YELLOW INDIAN REED.

****

Class and Order.

MONANDRIA MONOGYNIA.

Generic Character.

Anthera simplex filamenti margini adnata. *Stylus* crassus, claviformis. *Stigma* obtusum. *Caps.* 3-locularis. *Sem.* globosa, numerosa.

Specific Character and Synonyms.

CANNA *lutea ;* corollæ limbo interiore bifido. *Roscoe in Lin. Soc. transact.* 8. *p.* 338. *Hort. Kew. ed. alt.* 1. *p.* 2.

CANNA *indica,* β. lutea. *Hort. Kew. ed. I^ma. v.* 1. *p.* 1. *Willd. Sp. Pl.* 1. *p.* 1 *?*

CANNA indica flore luteo punctato. *Rivin. fl. irreg. monop.* 112.

Dr. ROXBURGH, in his Flora Indica not yet published, asserts, that the two varieties of red and yellow CANNA are exactly similar in the form of the corolla, and that consequently Mr. ROSCOE's *lutea* must be different, as he describes the interior limb of the corolla as bifid. Our plant agrees however with the description of the latter botanist, the interior border or limb consisting, not of three upright laciniæ as in *coccinea* (No. 454) but of two only, and these are narrower and sharper pointed. The other parts of the corolla are nearly similar in both: the external limb consists of three laciniæ shorter than the internal, upright, nearly equal in size, pointed, with involute margins; which in the present species are green upwards and purplish towards the base. The *nectarium* of LINNÆUS is composed of two laciniæ; the one reflexed, which has been stiled the labellum, or lower lip; the other, erect and revolute at the point, is called the *filament,*

ment, because it bears the anther on its margin; which organ when the blossom is expanded is a slender, long, brown body, attached from its base for about half its length to the margin of the filament or upper lip of the nectarium, the upper half remaining free. The *style* is a fleshy club-shaped body, rising far above the anther, rounded at the point, where it has generally a sphacelated appearance, but has no well defined stigma.

In order to understand the true organization of the parts of fructification, the flower-bud must be examined, as Mr. Brown so often recommends, long before the expansion of the corolla, for at the time this takes place the function of fecundation has been some time over, and the organs are become effete, and very much changed in their appearance. If the flower bud be examined before it is half the size that it arrives at when the blossom appears, the parts of fructification will be found remarkably different from what they are in an expanded flower. Removing carefully the calyx, the laciniæ of the exterior limb and those of the internal, at this time very small, there comes in sight a large anther of an oblong elliptical shape, with a deep groove down the front of it. A short rounded filament supports this anther, and is inserted at the posterior part near its base. The style at this time is considerably shorter than the anther; is flat and brought to a thin edge on one side, and is terminated with a distinct, fleshy, lobular stigma, which is wasted at the opening of the flower. At the posterior and lower part of the anther and filament, but not extending half way up, is attached the rudiment of what afterwards becomes the petal-like filament or upper lip of the nectarium, now rising far above the anther, and carrying it up on its margin in an effete withered state; the style also is extended greatly in length and loses its stigma.

The above observations were made on the flowers of Canna *coccinea*, but are doubtless applicable also to Canna *lutea*, and probably in degree to the other species.

Flowers most part of the year. Communicated by the Count de Vandes.

N 2086.

Curtis. Jun

PULTENÆA TENUIFOLIA. FINE-LEAVED PULTENÆA.

****

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus, labiis proportionatis, bibracteatus (bracteis sæpius ipso tubo insidentibus). *Cor.* papilionacea. *Germen* sessile, dispermum. *Stylus* subulatus, adscendens. *Stigma* simplex. *Strophiola* seminis lobis posticis incisis.

Specific Character.

PULTENÆA *tenuifolia;* capitulis terminalibus subbifloris, fructibus lateralibus foliis subulato-linearibus muticis supra concavis subtus convexis ramulisque pilosis. *Brown MSS.*

The *flowers* in this delicate little shrub grow from one to three at the extremities of the branchlets; but as these are proliferous or produce their young shoots from the same point, as soon as the flowering is over, the fruit becomes lateral; and as it sometimes happens that this extension of the branchlet takes place before the flowers drop, they will in such cases appear to be lateral instead of terminal. The *bracteæ*, or appendices of the calyx, are in this species inserted at the base of the tube, not, as in some others, at its superior part. The *vexillum* is nearly orbicular, not emarginate, yellow within, and streaked with red on the outside: *alæ* hardly exceeding half the length of the vexillum, connivent at the upper margin: carina shorter than these. The *leaves* are very narrow, and are convex on the under side, the margins being curved inwards instead of being revolute as in most part of the genus; and with the branches and calyxes are covered with soft hairs.

Native

Native of the South coast of New Holland, and probably of Van Diemen's Island. It was observed in several parts of the former by Mr. Brown, to whom we are indebted for enabling us to settle the species and to distinguish it from the *vestita* of the Hortus Kewensis, under which name we received it.

Flowers in April and May. Communicated by Messrs. Whitley, Brame, and Milne, from the Fulham Nursery.

N. 2087.

EUCALYPTUS PULVERULENTA. HEART-LEAVED EUCALYPTUS.

Class and Order.

ICOSANDRIA MONOGYNIA.

Generic Character.

Cal. superus, persistens, truncatus ante anthesin tectus *operculo* integerrimo, deciduo. *Cor.* 0. *Caps.* 4-locularis, apice dehiscens, polysperma.

Specific Character and Synonym.

EUCALYPTUS *pulverulenta ;* operculo hemisphærico, foliis oppositis orbiculato-cordatis integerrimis subcucullatis pulverulentis, pedunculis trifloris axillaribus cum floribus folio brevioribus.

EUCALYPTUS *cordata ;* operculo hemisphærico mucronato, foliis oppositis sessilibus cordatis crenatis. *Labill. Nov. Holl. p.* 13. *t.* 152 ?

Notwithstanding Mr. BROWN informs us, that the specimen of LABILLARDIERE's plant above quoted, is much less evidently crenulate than is represented in his figure, yet we can hardly venture to consider our plant as the same species; the leaves being rounder than in that, the common peduncle shorter than the calyx, instead of being the length of the flower together with the operculum. Besides that *cordata,* according to LABILLARDIERE is a lofty tree, which we should hardly expect ours to become, having a weak green stem hardly able to support itself, and seemingly adapted to grow in thickets where it might be supported by the neighbouring shrubs. But we do not put full confidence in these observations, because the foliage and habit of young plants often change so materially, when they become arboreous. The younger leaves are very white on the upper surface but

green

green underneath, and the colour consisting of a fine white powder is easily washed or rubbed off, and hence is hardly seen upon the older leaves.

There are at least three distinct species, known by the name of *glauca* in our collections; on which account we have chosen to call our plant by one better adapted to the nature of the white colour, which is very like that of Cassine *pulverulenta*.

Native of New Holland. Flowers in April and May. Communicated by Messrs. Barr and Brookes, of the Northampton Nursery.

N2088

TEMPLETONIA GLAUCA. GLAUCOUS-LEAVED TEMPLETONIA.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. ebracteatus, 5-dentatus: dentibus parum inæqualibus. *Carina* oblonga. *Stam.* omnia connexa? antheris uniformibus. *Legumen* pedicellatum, plano-compressum, polyspermum. *Semina* strophiolata.

Specific Character.

TEMPLETONIA *glauca;* foliis glaucis bracteis duabus calyci approximatis, staminibus hypodiadelphis.

The plant from which our drawing was taken was communicated by Mr. WILLIAM KENT, from his curious collection of exotics at Clapton. It differs from TEMPLETONIA *retusa* chiefly in the glaucous colour of the *leaves,* which are obcordate-cuneate, slightly emarginate, with a small mucro: those on the young shoots are yellowish green and not at all glaucous. The *flowers* are large, of a deep scarlet colour, axillary, solitary, on short *peduncles,* which are furnished with two concave bractes close to the calyx, but not attached thereto. These bractes in *retusa* are described as being situated in the middle of the peduncle, and, if constant, this circumstance may afford a good distinguishing character. The *petals* are all nearly equal in length: *vexillum* oblong-ovate, emarginate, concave, in our plant not at all reflexed: *alæ* linear lanceolate: petals of the *carina* united at the tip. *Stamens,* which in *retusa* are described as monadelphous, were not altogether so; one of the filaments being shorter

shorter than the rest, and though slightly united, was easily separable to the base. *Germen* linear, pedicled: *ovula* several. *Style* nearly twice the length of the germen.

Native of the South-west coast of New Holland, where it was discovered by Robert Brown, Esq. who first established the genus Templetonia, Ventenat having referred it to Rafnia. Flowers in April and May.

N 2089.

Pub. by S. Curtis, Walworth Aug.st 2 1819

VIOLA BIFLORA. TWO-FLOWERED VIOLET.

****

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-phyllus. *Cor.* 5-petala, irregularis, postice cornuta.
Anth. cohærentes. *Caps.* supera, 3-valvis, 1-locularis.

Specific Character and Synonyms.

VIOLA *biflora ;* caule bifloro foliis reniformibus serratis. *Willd. Sp. Pl.* 1. *p.* 1167. *Hort. Kew. ed. alt.* 2. *p.* 47. *Gmel. Sibir.* 4. *p.* 98. *n.* 61. *Flor. Dan. t.* 46. *Decand. Fl. franç. v.* 5. *p.* 808.

VIOLA *biflora ;* pedunculis caulinis, stipulis lanceolatis, foliis reniformibus. *Scop. Fl. Carniol. n.* 1099.

VIOLA caule debili paucifloro, foliis petiolatis, reniformibus, obtuse dentatis. *Hall. Hist. n.* 564.

VIOLA alpina rotundifolia lutea. *Bauh. Pin.* 199. *Bauh. Hist.* 3. *p.* 545, *f.* 1.

VIOLA montana I^ma. *Clus. Pan. p.* 357. *Hist.* 1. *p.* 309. *f.* 2.

VIOLA flore luteo. *Icon. Gesn. æn. t.* 8. *f.* 70.

VIOLA alpina rotundifolia minor lutea. *Pluk. Phyt. t.* 233. *f* 7.

The VIOLA *biflora* is a small hardy perennial ; native of the Alps, of the South of Europe, and of Siberia.

CLUSIUS mentions his having been informed that this violet was found in the mountains of the North of England, whence it has been supposed to be indigenous to this country. And in SOLANDER's manuscripts it is said to have been found in the Welch mountains. This does not however appear to have been confirmed, for it is not recorded as a British species in the Compendium Floræ Britannicæ of Sir JAMES EDWARD SMITH.

The figure of this plant in the Flora Danica, above quoted, is very good; and PLUKENET's is no bad representation of its habit;

habit; all the other figures are very indifferent except that of Gesner, which is not amiss, but is designed from a one-flowered variety.

Cultivated by Philip Miller, in 1752; yet seems to be little understood by our collectors, for we have received it under the names of *pubescens* and of *pusilla*. Flowers in April and May. Communicated by Messrs. Malcolm, from their extensive collection at Kensington.

N 2090

PSORALEA ARBOREA. TREE-LIKE PSORALEA.

****

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. longitudine Leguminis. *Stam.* diadelpha. *Legumen* monospermum, subrostratum, evalve.

Specific Character.

PSORALEA *arborea,* foliis pinnatis, quinque-jugis; foliolis lineari-lanceolatis, pedunculis axillaribus unifloris folio longioribus, bractea monophylla bilabiata calyci hirsuto approximata.

DESCR. *Stem* woody with a smooth bark. Branches angulated. *Leaves* pinnate: leaflets from four to six, more usually five pair, with an odd one, linear lanceolate, smooth, an inch long, opposite, distant. *Stipules* callous, ovate, recurved. *Peduncles* axillary, hairy, one-flowered, longer than the leaf, furnished with a single one-leafed, two-lipped bracte near the *calyx,* which is one-leafed, 5-toothed, covered with black hairs. *Corolla* papilionaceous: *vexillum* large, reflexed, emarginate. *Alæ* smaller by half, standing forward. *Carina* small, incurved.

MR. BLAKE, gardener to JAMES VERE, Esq. raised this plant from seed sent from the Cape of Good Hope, under the name of *arborea,* and says that he has before known it so called in different collections. We cannot find that it has been any where described, unless it should be the *lævigata* of the Supplementum Plantarum of the younger LINNÆUS, with the description of which, however, it does not correspond in several important particulars. From the *odoratissima* of JACQUIN it differs in the great length of the peduncles, as well as in the leaflets being fewer in number and longer. Flowers in May.

N 2091

J. Curtis Del

Pub. by S. Curtis. Walworth. Aug. 1. 1829.

PULTENÆA BILOBA. LOBED-LEAVED PULTENÆA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus, labiis proportionatis, bibracteatus (bracteis sæpius ipso tubo insidentibus). *Cor.* papilionacea. *Germen* sessile, dispermum. *Stylus* subulatus, adscendens. *Stigma* simplex. *Strophiola* seminis lobis posticis incisis.

Specific Character.

PULTENÆA *biloba;* capitulis terminalibus paucifloris, foliis cuneiformibus apice dilatato-bilobis supra tuberculato-scabris subtus sericeis, mucrone brevi marginibusque recurvis. *Brown Mss.*

PULTENÆA *scabra;* capitulis foliis subulato-linearibus supra concavis subtus convexis setaceo-mucronatis margine recurvis supra scabris subtus villosis, stipulis setaceis recurvis. *Brown in Hort. Kew. ed. alt.* 3. *p.* 18.

DESCR. *Stem* shrubby, branched; *branches* patent, clothed with white branched hairs: *branchlets* short, alternate, subequal, bearing from two to four flowers, in a terminal capitulum. *Leaves* wedge-shaped, ciliated, divided at the apex, into two lobes with a short recurved mucro between them, tubercular on the upper surface, and silky on the under, with recurved margins. *Stipules* deciduous, black, patent. *Calyx* campanulate, with a five toothed border; *teeth* acute, lengthened: *bractes* (appendixes of Smith) two, lanceolate, attached to the upper part of the tube of the calyx. *Corolla* papilionaceous: *vexillum* suborbiculate, emarginate, subconnivent, golden yellow. *Alæ* smaller, oblong, of the same colour.

colour. *Carina* two-petaled, dark purple. *Filaments* distinct. *Style* longer than these: *stigma* simple.

PULTENÆA *biloba* is a very pretty lively little shrub, producing from April to July, abundance of golden yellow flowers with a dark purple keel. It is most nearly allied to PULTENÆA *scabra* of the Hortus Kewensis, from which however it is very distinct, the leaves of the latter being oblong-wedge-shaped, and truncated, not dilated into two lobes at the apex, as in our plant, in which also the stipules are not recurved, but patent, or sometimes upright.

We are indebted to our friend Mr. ROBERT BROWN, for his assistance in determining this species, by whom it was first discovered in New South Wales.

Raised from seeds by Messrs. LODDIGES and SONS some years ago, by whom it was communicated to us.

J. Curtis Del.

Pub. by S. Curtis, Walworth. Sep. 2. 1819.

CACTUS PHYLLANTHOIDES. ROSE-FLOWERED INDIAN-FIG.

****

Class and Order.

ICOSANDRIA MONOGYNIA.

Generic Character.

Cal. 1-phyllus, superus, imbricatus. *Cor.* multiplex. *Bacca* 1-locularis, polysperma.

Specific Character and Synonyms.

CACTUS *phyllanthoides;* caulibus compressis foliaceis margine serrato-repandis, petalis interioribus tubo longioribus. *De Cand. Hort. Monsp. p.* 84. *n.* 41.

CACTUS *speciosus;* caulibus articulatis, compressis, foliaceis, serrato-repandis; floribus magnis tubo inermi, squamuloso. *Bonpl. Plantes Nav. et Malm. p.* 8. *t.* 3. *Bot. Reg.* 304.

PHYLLANTHOS americana sinuosis foliis longis crassis et carnosis, Opuntiæ in modum florigera. *Pluk. Alm. p.* 295. *Phyt.* *t.* 247. *f.* 5. Synonymon Cacto *Phyllantho* olim relatum, sed, ob tubi brevitatem, huc potius pertinens.

This very beautiful plant is a native of South America, and was discovered by the celebrated travellers HUMBOLDT and BONPLAND in April 1801, near the small village of Turbaco, a few leagues south of Carthagena, at an elevation of about 390 yards above the sea shore, growing upon the trunks of old trees.

It first flowered in Europe in May 1811, and at the same time, both in the garden of Malmaison, then belonging to the late Empress JOSEPHINE, and in the Botanic garden at Montpelier. In the latter place it was described and named by the Professor of Botany, and subsequently the one which flowered at Paris, was described and figured by M. BONPLAND under

under the name of *speciosa*. But De Candolle's name of *phyllanthoides* having the right of priority, we of course adopt it, and the more willingly, because Willdenow had previously given the name of *speciosa* to a different species.

M. De Candolle remarks, that before it flowered this plant could no way be distinguished from Cactus *Phyllanthus*, but the flower is totally different, that of the latter having a tube many times longer than the limb, and being of a greenish white colour, expanding in the night, and diffusing a fragrant odour; whilst our plant expands in the day time and is scentless.

Authors generally describe both a *calyx* and *corolla*, but we perceive no distinction, unless the calyx had fallen from all the flowers before we saw them. To us it appears that the *scales* on the tube of the flower gradually enlarge till they become petals, the internal ones being the longest. The *filaments* are very many, the length of the flower, and, with the oval *anthers*, white. *Style* equal to the filaments, and in each of the three flowers of our specimen divided into seven *stigmas*. *Germen* inferior, one celled; *ovula* many, shining, attached to the parietes by a cord that half surrounds the ovulum and enters it at its most distant point.

The fine specimen from which our drawing was taken, was liberally communicated by Thomas Wildman, Esq. of Layton, in Essex, in May last.

Convolvulus Turpethum. Turbith Bind-Weed.

Class and Order.

Pentandria Monogynia.

Generic Character.

Cor. campanulata, plicata. *Stigmata* 2. *Caps.* 2-locularis: loculis dispermis.

Specific Character and Synonyms.

Convolvulus *Turpethum;* volubilis, foliis cordatis angulatis, calycis foliolis externis maximis carnosis, fructu inflato, loculis monospermis, seminibus glabris.

Convolvulus *Turpethum;* foliis cordatis angulatis, caule membranaceo quadrangulari, pedunculis multifloris. *Sp. Pl.* 221. *Syst. Veg. ed.* 14. *p.* 201. *Willd.* 1. *p.* 859. *Persoon Syn.* 1. *p.* 179. *n.* 57.

Ipomæa Turpethum. *Brown Prodr. p.* 401. *Bot. Reg.* 279.

Turpethum repens foliis altheæ vel indicum. *Bauh. Pin.* 149. *Blackw. Herb. t.* 397. fig. ex Hermanno corrupta.

Convolvulus indicus alatus maximus foliis Ibisco nonnihil similibus angulosis. *Herm. Lugdb. p.* 177. *t.* 178 & 9.

Desc. *Stem* climbing, quadrangular: flowering branches obsoletely angular, lactescent. *Leaves* oblong-cordate: upper ones narrowest, variously sinuate and angular; veins on the upper surface depressed, on the under raised. *Peduncles* solitary, axillary, longer than the petiole, furnished near the middle with two very small ovate bractes, which fall off long before the flower appears. *Calyx* of five leaflets, of which the two outer are much the largest, completely concealing the others, slightly tinged with purple, succulent and covered with dark

dark spots on the inside, which shew through and remain when the calyx is quite dried, persistent, and in the fruit much inflated and membranous. *Capsule* perhaps naturally 4-celled, as figured and described by HERMAN, but one, two, or three of them frequently fail, reducing them at times to the lowest number. Each cell contains one smooth seed, nor in the germen could we find more than one ovulum in each cell. *Style* divides easily into two parts, or probably into as many as there are cells. *Filaments* dilated at the base, or a broad band runs from their insertion down to the bottom of the corolla, but connate with it.

We have chosen to retain the old name of CONVOLVULUS rather than adopt that of IPOMÆA; not only for the reason mentioned at No. 1572, but from an apprehension that this species, with some other analogous ones, will eventually be separated into a distinct genus, for which the large succulent calyx becoming in the fruit inflated and bladder-like, the transparent crown of the capsule and the single-seeded cells seem to afford sufficient data.

The CONVOLVULUS *Turpethum* has a very extensive range, being found in Ceylon, Sumatra, Malabar, Coromandel, New Holland, and Otaheite, or at least species approaching so near to each other that it is not easy to distinguish them. There is however a considerable variation in the appearance of the bracteæ, which in the specimens preserved in HERMAN'S Herbarium, now in possession of Sir JOSEPH BANKS, and especially in one from Tranquebar, are membranaceous, large, coloured, and sometimes remain on till the flower is nearly expanded; the stems also vary much in the angles, being more or less winged; in our specimens, which were only of the flowering branches, they were not only not at all winged, but the angles themselves were obsolete.

We were favoured with the specimens from which our drawing was made, in April last, by the Hon. WILLIAM HERBERT, of Spofforth.

N2094.

Publ.by S.Curtis Wilworth.

Waddell.Sc

BERCKHEYA UNIFLORA. ONE-FLOWERED BERCKHEYA.

Class and Order.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Generic Character.

Receptaculum favosum. *Semina* villosa. *Pappus* paleaceus (nunc setoso-paleaceus ciliatus). *Cal.* 1-phyllus: foliolis imbricatis tectus. BROWN.

Specific Character and Synonyms.

BERCKHEYA *uniflora*; foliis alternis lanceolatis spinoso-dentatis subtus tomentosis, caule herbaceo unifloro, calycinis squamis lanceolatis spinoso-serratis radium subæquantibus. *Willd. Sp. Pl.* 3. *p.* 2274. *Persoon Syn.* 2. *p.* 481.

ROHRIA *monanthos*; foliis ellipticis subtus tomentosis, calycinis foliolis lanceolatis ciliato-spinosis. *Thunb. Prodr.* 140. *Act. Soc. Nat. Serut. Hafn.* 3. *p.* 102. *t.* 7.

The genus BERCKHEYA was established by FRED. EHRHART, in honour of J. F. VAN BERKHEY, author of a learned treatise on the structure of compound flowers, antecedently to the name of ROHRIA by THUNBERG, which it has accordingly superseded.

In one circumstance this plant does not altogether correspond with the above generic character; the leaflets of the calyx being divided quite to the base, but in other respects it agrees well. The seeds are sunk in the cells of the receptacle, are covered with long white hairs, and crowned with a pappus, consisting of a regular row of lanceolate paleæ, which are longer than the seed. The interior row of the leaflets of the calyx are narrow-lanceolate, quite entire, erect, and

and armed with an extremely sharp spine: the exterior ranks are wider, and armed, not at the point only, but at the margins, with spinous ciliæ.

The BERCKHEYA *uniflora* is an herbaceous perennial. Flowers from August to October. Native of the Cape of Good Hope. Communicated by Mr. JENKINS, from his botanical garden in Gloucester Place, New Road.

1205

J. Curtis Del.

Pub. by S. Curtis. Walworth. Sept. 2. 1829.

CULLUMIA CILIARIS. CILIATED CULLUMIA.

****

Class and Order.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Generic Character.

Receptaculum favosum. *Semina* glabra. *Pappus* 0. *Calyx* monophyllus, foliolis imbricatis tectus. BROWN.

Specific Character and Synonyms.

CULLUMIA *ciliaris*; foliis ovatis glabris imbricatis bifariam ciliato-spinosis: spina terminali reflexa. *Br. in Hort. Kew ed alt.* 5. *p.* 137. *Bot. Reg.* 384.

BERCKHEYA *ciliaris*; foliis ovatis glabris imbricatis margine et costa media ciliato spinosa, apice spinoso, spina reflexa. *Willd. Sp. Pl.* 1. *p.* 2273. *Persoon Syn.* 2. *p.* 481.

ROHRIA *ciliaris*; foliis ovatis glabris bifariam ciliatis ciliis exterioribus spinaque terminali reflexis. *Thunb. Prodr.* 140. *Act. Soc. Nat. Scrut. Hafn.* 3. *p.* 99.

GORTERIA *ciliaris*; foliis imbricatis bifariam ciliatis; ciliis exterioribus spinaque terminali reflexis. *Sp. Pl.* 1284. *Hort. Kew. ed. l.* 3. *p.* 255.

CARLINA foliis imbricatis oblongis reticulatis et in aculeum aduncum desinentibus *Burm. Afr.* 151. *t.* 54. *f.* 1.

ATRACTULIS 4. Carduus africanus luteus, atractylidis facie, extremo foliorum aculeo adunco D. Herman. *Raj. Suppl.* 196.

ATRACTYLIDIS facie aculeosa æthiopica. *Pluk. Amalth.* 51. *t.* 354. *f.* 3. *Seb. Mus.* 1. *t.* 23. *f.* 1.

DESC. *Stem* shrubby: *branches* closely covered with imbricated ovate leaves, terminated with a reflexed, sharp, brown spine, and having their margins ciliated with a double row of spines, of which the outer row is reflexed, the inner erect, forming a wonderful

wonderful defence, offering points in every direction. *Calyx* squarrose: *leaflets* imbricate, armed with spines in the same manner as the leaves, except that the interior ones have the terminal spine erect and their margins naked, the exterior leaflets have a black gland at the base of the marginal spine. *Radius* bright yellow, many flowered: *florets* narrowed at both ends, emarginate, 5-nerved, barren: *disk* flat, yellow: *florets* 5-cleft, erect, fertile: anthers and style barely protruded. *Seeds* without pappus, immersed in the deep cells of the receptacle, which, having a bristly margin, give, at first sight, the appearance of a pappus.

The genus Gorteria, as constituted by Linnæus, containing many plants which have but slight affinity to each other, has been divided by later botanists into several. Cullumia was established by Mr. Brown, and "dedicated to the honour of the late Sir John Cullum, Bart. an elegant and accomplished scholar and botanist, as well as of his brother, the present Sir Thomas Gery Cullum, Bart. F. R. A. and L. S. an excellent British botanist, one of the most ardent cultivators of this lovely science, whose friendship alone can be more valued than his various and extensive information." *Sir Jas. Edw. Smith in Rees's Cyclopædia.*

Introduced in 1774 by Mr. Francis Masson. Native of the Cape of Good Hope, growing at the summit of the Devil's mountain. Requires the protection of the green-house in winter. Flowers in May and June. Communicated by Messrs. Loddiges and Sons.

FERULA PERSICA. PERSIAN FENNEL-GIANT.

Class and Order.

PENTANDRIA DIGYNIA.

Generic Character.

Fructus ovalis, compresso-planus, striis utrinque 3.

Specific Character and Synonyms.

FERULA *persica ;* foliis supra decompositis : foliolis multifidis acutis decurrentibus, umbella primordiali sessili. *Willd. Sp. Pl.* 1. *p.* 1413. *Hort. Kew. ed alt.* 2 *p.* 137. *Bot. Repos.* 558. *Persoon Syn.* 1. *p.* 312. *n.* 13.

ASSA FŒTIDA. *Hope in Philos. trans. v.* 75. 1785. *p.* 36. *t.* 3. & 4.

FERULA Assa fœtida. *Mart. Mill. Dict. n.* 9. Excluso Synonymo Kæmpferi.

Seeds of the FERULA *persica* were sent to PALLAS from the mountains of Ghilan in Persia, supposed to be those of the plant producing the Assa fœtida. From these several plants were raised by the Professor at Petersburgh, and two of these were sent by Dr. GUTHRIE to the late Dr. HOPE, Professor of botany in Edinburgh, one of which lived and produced seeds, and from this source probably sprung the plant in the Apothecaries garden at Chelsea, from which our drawing was made.

That this is the real plant producing the Assa fœtida, seems confirmed by the strong smell of that drug which pervades the whole herb, and indeed we have picked off small globules of true Assa fœtida that had exuded from the stem. At the same time it is evident that it is not the same species as described by the accurate KÆMPFER. This author, whilst he allows that the inhabitants of Chorasan and Laristan, the two provinces famous for this production, believe that their

plants

plants are of a different kind, convinced himself, by an examination of both, that there was no real difference between them: so that it must remain doubtful whether we have yet seen the true species producing the Assa fœtida; but from our present greater intercourse with Persia, it is probable that we shall not be long without more satisfactory information.

It appears from KÆMPFER's account that the plants which produce the drug in abundance, are confined to very limited districts, and that beyond these, their smell becomes much less powerful, and is at length so mild, that goats are very fond of it, and fatten wonderfully upon it. An observation which does not tend to encourage the expectations entertained by the late Professor HOPE, that this drug might hereafter be produced in our own country.

It is a hardy perennial. Flowers from May to July. Communicated by Mr. WILLIAM ANDERSON, from the Botanic garden at Chelsea.

LIMODORUM FALCATUM. FRAGRANT LIMODORUM.

Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Petala 5, subpatentia. *Labellum* basi antice in cornu liberum productum. *Anthera* terminalis.

Specific Character and Synonyms.

LIMODORUM *falcatum;* foliis subradicalibus ensiformi-canaliculatis falcatis, scapis paucifloris, cornu filiformi longissimo. *Swartz in Nov. Act. Ups. v. 6. p. 79. Willd. Sp. Pl. 4. p. 126. Persoon Syn. p. 520. n. 10. Bot. Reg. 283. Thunb. Ic. Pl. Jap. t. 6.*

ORCHIS falcata. *Thunb. Jap. p. 26. Syst. Veg. ed. 14. p. 811.*

This pretty little plant is also very fragrant. It is a native of Japan, where, according to THUNBERG, it grows on the mountains among shrubs; but as this traveller had no opportunity of gathering the plants from their place of growth, it must be uncertain whether it grew on the earth, on rocks, or parasitically on trees; by the manner in which it puts forth its roots, if they can be so called, we should judge that its natural situation was not on the soil. Our plant was cultivated in the garden of the Horticultural Society as an air plant, being suspended from the roof of the stove in a basket with only a little moss in it; and was communicated by the society's gardener, Mr. CHARLES STRACHAN, in May last.

It was first cultivated in England by Sir ABRAHAM HUME, at Wormleybury, who received the plant from the East Indies, through the late Dr. ROXBURGH.

Orobus Lathyroides. Upright Bitter-Vetch.

Class and Order.

Diadelphia Decandria.

Generic Character.

Stylus linearis. *Cal.* basi obtusus: laciniis superioribus profundioribus, brevioribus.

Specific Character and Synonyms.

Orobus *Lathyroides;* foliis conjugatis subsessilibus, stipulis dentatis. *Hort. Ups.* 220. *Sp. Pl.* 1027. *Syst. Veg.* 14. *p.* 661. *Willd.* 3. *p.* 1072. *Hort. Kew. ed. alt.* 4. *p.* 303. *Persoon Syn.* 2. *p.* 303. *Pall. it.* 2. *p.* 559. *Gmel. Sib.* 4. *p.* 12.

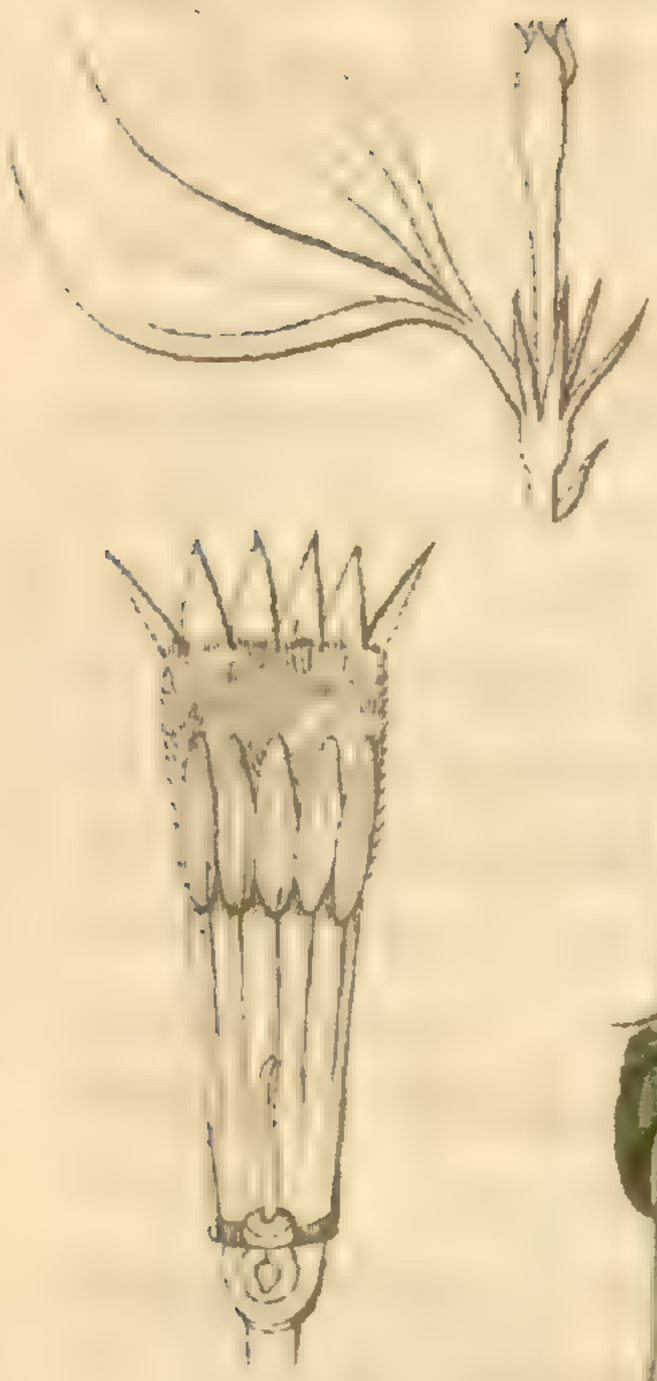
Lathyroides erecta, folio ovato-acuminato, cæruleis viciæ floribus et siliquis, sibirica. *Amman Ruth. p.* 124. *n.* 151. *t.* 7. *f.* 2.

Linnæus first constructed a botanical language upon philosophical principles, by means of which, each idea might be expressed without any useless words. He carried this so far that, by his peculiar punctuation alone, he often expresses what other authors use many words to arrive at. In like manner the use of capital or small letters was with him never arbitrary, but expressive of some idea. But of late we observe that botanists are frequently inattentive to this precision. The present plant affords an instance of this neglect, which, however, may perhaps have originated in an oversight of the great botanist himself. In all late systematic publications, the specific name is written *lathyroides* with a small *l;* which would signify that the plant in the author's idea was *lathyrus-like.* But it appears to us that in this instance Linnæus did not

not use the term as an adjective, but because MESSERSCHMID had constituted a genus under the name of LATHYROIDES from this plant, and that consequently it should have been written with a capital *L*, OROBUS *Lathyroides*, denoting that it was a species of OROBUS that had been called a LATHYROIDES; just as ANTHYLLIS *Erinacea* denotes, that the plant had been before called ERINACEA by CLUSIUS; which had it been written *erinacea*, would have been merely an epithet signifying that it was prickly like a hedge-hog; or as RUMEX *Britannica* denotes a species of RUMEX, supposed to be the herb called by the ancients BRITANNICA, which had it signified British would have been *britannicus*. We have observed that the error might probably arise from an oversight of LINNÆUS himself, because as early as in the twelfth edition of the Systema Vegetabilium, we find it written with a small letter, *lathyroides*, which we account for in this way; LINNÆUS in the second edition of the Species Plantarum, the first in which he made use of trivial, or, as we now generally call them, specific names, had in all cases used a capital letter for words ending in *oides*, which being, according to his own rule of using small letters to all adjectives, evidently wrong, he afterwards corrected; and we suppose that in the general change the present name was inadvertently altered with the rest.

The OROBUS *Lathyroides* is a hardy perennial, worthy of cultivation for the beauty of its flowers. Native of Siberia, where it is said to be very common on the open hills and among the herbage. It is easily propagated by parting its roots or by seeds; yet it is not a plant of very common occurrence in our gardens. Flowers in June. Cultivated by PHILLIP MILLER in 1758. Communicated by Messrs. CHANDLER and BUCKINGHAM from their extensive collection at Vauxhall.

N. 2099.



Pub. by S. Curtis. Walworth. Octr 1st 1809.

MUSSÆNDA PUBESCENS. CHINESE MUSSÆNDA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis. *Stigmata* 2, crassiuscula. *Bacca* oblonga, infera. *Sem.* quadrifariam disposita.

Specific Character and Synonyms.

MUSSÆNDA *pubescens*; ramis foliisque pubescentibus, tubo corollæ multoties longiore laciniis calycinis. *Hort. Kew. ed. alt.* 1. *p.* 372.

CUM MUN FA. *Chinese drawings, in the library of Sir Joseph Banks.*

The beauty and singularity of this plant arise from a very unusual deviation from the ordinary structure; the free part of the *calyx* is divided into very narrow subulate segments; in our specimens about half the length of the tube of the corolla (Dryander says in the Hortus Kewensis many times shorter). But what is singular is, that in many, but not all of the flowers, one of these segments, and one only, expands into an ovate thin leaf or kind of bracte of a very white colour, veined and more or less tinged with green.

There are several other species of MUSSÆNDA which produce similar bractes, varying however in form and colour. MUSSÆNDA *pubescens* is a native of China and succeeds well in a good greenhouse. We were favoured with the specimen from which our drawing was made by Mr. WILLIAM KENT, from his very fine collection at Clapton. Flowers most part of the Summer.

N.2100.

Curtis Del.

Pub. by Curtis Walworth London

Calostemma purpureum. Purple Calostemma.

* * * * * * * * * * * * * * * * *

Class and Order.

Hexandria Monogynia.

Generic Character.

Cor. supera, infundibuliformis, limbo 6-partito. *Nectarium* tubulosum, ore 12-dentato : dentibus alternis subulatis antheriferis. *Antheræ* versatiles. *Germen* 1-loculare, 2—3-spermum. *Stylus* filiformis. *Stigma* obtusum. *Bacca* [*Capsula*] sphærica, 1—2-sperma. Brown, (mutatis terminis.)

Specific Character and Synonyms.

Calostemma *purpureum ;* foliis lineari-loratis, nectario subsexfido : laciniis tridentatis, dente intermedio staminifero.
Calostemma *purpureum ;* scapo florido foliis lineari-loratis præcociore, coronæ dentibus sterilibus triangularibus. *Brown Prodr. p.* 298.

Desc. *Bulb* roundish. *Leaves* narrow, thong-like, obtuse, concave towards the base. *Scape* about two feet high, somewhat flattened, filled with juicy pith. *Flowers* purple, growing in an umbel of about sixteen, on pedicles from an inch and half to half an inch long. *Corolla* funnel-shaped : *tube* grooved, shorter than the *limb*, which is obovate-concave, obtuse with a small mucro. *Nectarium* or *crown*, tubular, shorter than the limb, greenish, margin divided into six superficial laciniæ terminated with three small teeth : the middle one bearing the filament. The divisions are generally superficial, but sometimes one or more of them extend far down the nectarium. *Stamens* hardly equaling the corolla : *anthers* ovate. *Germen* inferior, globular, one-celled with two *ovula*, one of which is generally abortive. *Style* a little longer than the stamens. *Stigma* simple. *Capsule* one-seeded. *Seed* large, smooth, oval or spherical

We

We were favoured with the plant from which our drawing was taken by Edward Barnard, Esq. of the Colonial Department, who flowered it in July last, at Bexly in Kent, by setting the pot halfway up in water. The bulb was imported from New South Wales in 1817 It was discovered in the expedition to the south-westward from Port Jackson, beyond the blue mountains, and was sent to Mr. Barnard, together with a drawing by Mr. Lewin, under the name of Pancratium *Macquaria,* given to it in honour of the Governor of New South Wales. But Mr. Robert Brown, had long before found the same species upon Mount Brown, at the head of Spencer's gulf on the south-west side of New Holland, and published it in his Prodromus, as above quoted, under the name which we have adopted.

N. 2101.

Walworth. Occ.1 Bag.

CALOSTEMMA LUTEUM. YELLOW CALOSTEMMA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Corolla supera, infundibuliformis, limbo sexpartito. *Nectarium* tubulosum, ore 12-dentato, dentibus alternis subulatis antheriferis. *Antheræ* versatiles. *Germen* 1-loculare, 2—3-spermum. *Stylus* filiformis. *Stigma* obtusum. *Bacca* [*Capsula*] sphærica, 1—2-sperma.

Specific Character.

CALOSTEMMA *luteum*; foliis lineari-loratis, nectario subintegro inter stamen utrumque bidenticulato.

However readily this plant and the preceding are distinguished by the colour of the flowers, it is not easy to find specific distinguishing characters. The corolla of *luteum* is somewhat larger and less connivent; but the principal difference exists in the nectarium, which, at least in the few specimens that we had an opportunity of examining, had a margin more entire, not divided into so distinct laciniæ, or if the smaller indentations can be considered as laciniæ, the filament rises from the sinus between the laciniæ and not from the middle of the lacinia as in *purpureum*. But we must acknowledge that we have not examined a sufficient number of flowers to be certain that this distinction will always hold good. If not, the colour of the flowers alone makes it probable that they are not mere varieties; for it has been doubted whether purple flowers ever vary to yellow in the same species; the few instances in which this variation has been supposed to take place being uncertain. There are six bright crimson spots on the base of the nectarium which show through the interstices between the outer laciniæ.

This

This plant was found on the same expedition as the preceding, and bulbs of both species were sent to the botanical garden, belonging to the Apothecaries Company, at Chelsea, by Barron Field, Esq. Judge of the supreme court of civil judicature in New-South-Wales; where our drawing of the present plant was taken, and both sorts flowered, under the management of Mr. Anderson, in great perfection.

COMBRETUM PURPUREUM. MADAGASCAR COMBRETUM.

Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4—5-dentatus, campanulatus, superus. *Cor.* 4—5-petala, calyci inserta. *Stamina* longissima. *Sem.* 1, 4—5-angulare; angulis membranaceis.

Specific Character and Synonyms.

COMBRETUM *purpureum;* floribus decandris, racemis simplicibus compositisque, foliis ovato-oblongis.

COMBRETUM *coccineum* floribus decandris, spicis laxis paniculatis. (Chigonier de Madagascar.) *Lam. Encyl.* 1. *p.* 734. *Ill. t.* 282. *f.* 2.

COMBRETUM *purpureum;* foliis ovato-oblongis calycibusque nudis, spicis simplicibus secundis. *Vahl Symb.* 3. *p.* 51. *Persoon Syn.* 1. *p.* 4.

COMBRETUM *purpureum;* foliis oppositis ovatis acutis, racemis secundis bracteatis, bracteis pedunculo brevioribus, floribus decandris. *Willd. Sp. Pl.* 2. *p.* 319.

CRISTARIA. *Sonnerat it.* 2. *p.* 247. *t.* 140.

This beautiful climbing shrub is a native of Madagascar, and was raised from seeds sent from the Mauritius to our friend ROBERT BARCLAY, Esq.; and flowered in his stove at Bury Hill in June last, among many other rare plants from that country.

This species is constantly decandrous, and has five petals and five wings to the seed-vessel; for it appears to us to be a five-winged capsule, containing a single seed about the size and shape of a barley-corn, rather than a naked seed with membranaceous angles.

Our

Our drawing was taken by Mr. Duncombe, and kindly communicated by Mr. Barclay, together with a specimen of the foliage and a seed; but we had no opportunity of seeing the flowers.

This plant was first recorded as a Combretum by Lamarck, in the Encyclopedie Botanique, and a specimen of the plant was given by him to the late Professor Vahl, who changed the specific name to *purpureum*: but as there seems to be no good reason for this alteration, we should have certainly thought it right to restore the original appellation; only that of Vahl having been adopted in the popular systems of Willdenow and Persoon, the restoration might now tend to occasion confusion.

N. 2103.

Pub. by Curtis, Botanical Magazine, Lambeth.

GLYCINE FRUTESCENS. CAROLINA KIDNEY-BEAN-TREE.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 2-labiatus. *Corollæ* carina apice vexillum reflectens.

Specific Character and Synonyms.

GLYCINE *frutescens;* foliis impari pinnatis novenis ovatis, racemis bracteatis, caule frutescente volubili. *Willd. Sp. Pl.* 3. *p.* 1067. *Hort. Kew. ed. alt.* 4. *p.* 298. *Persoon. Syn.* 2. *p.* 301.

GLYCINE *frutescens;* foliis impari-pinnatis, caule perenni. *Sp. Pl.* 1025.

GLYCINE *frutescens;* sarmentis lignosis, foliis impari-pinnatis pubentibus, leguminibus coriaceis. *Michaux Bor. Am.* 2. *p.* 63.

GLYCINE *frutescens;* foliis impari-pinnatis, caule perenni, spica terminali alopecuroidea. *Lam. Encycl.* 2. *p.* 730.

APIOS *frutescens;* volubilis, foliis impari-pinnatis novenis ovatis pubescentibus, racemis terminalibus bracteatis, leguminibus coriaceis. *Pursh. Flor. Am. Sept. p.* 474.

WISTERIA speciosa. *Nuttall North-Am. Plants.* 2. *p.* 116.

PHASEOLOIDES frutescens caroliniana, foliis pinnatis floribus cæruleis conglomeratis. *Hort. Angl.* 53. *t.* 15.

DESCR. *Stem* twining, shrubby. *Leaves* odd-pinnate: *leaflets*, in the cultivated plant, more usually eleven, the lower pair distant from the rest, and sometimes wanting, oval, acute, quite entire, shining above, pubescent and paler beneath. *Common petiole* swoln at the base, half-rounded, grooved

grooved above: partial petioles short, opposite. *Flowers* in terminal, crouded racemes. *Calyx* gibbous at the base, bilabiate: *upper-lip* truncate: *lower-lip* 3-toothed, subulate. *Corolla* papilionaceous: *vexillum* suborbiculate, emarginate, spreading, *claw* cartilaginous, extending into the middle of the limb: *alæ* shorter, connivent, slightly united at the apex: *carina* shorter by half than vexillum, petals sometimes united, at others distinct, boat-shaped, incurved at the point but not reflecting the vexillum. *Stamens* diadelphous. *Bractes* large, enveloping the flower-buds, ovate-acuminate, purple, extremely deciduous. *Legume* said to be coriaceous; *seeds* the size of a small kidney-bean, and spotted.

Pursh has united this with Glycine *Apios*, (No. 1198) under the generic name of Apios; but Nuttall separates it from Apios and considers it as a distinct genus, to which he has given the name of Wistera, in honour of the late Dr. Caspar Wistar, Professor of anatomy in the university of Pensylvania. We think it best to retain the name by which it has been generally known, and under which it is recorded in the last edition of the Hortus Kewensis, though, it must be allowed, that the genus Glycine is at present rather a heterogeneous compound.

A very ornamental shrub, tolerably hardy, but does not flower very readily except in favourable situations. There used to be a very fine plant trained up against the house at Messrs. Loddiges and Sons at Hackney, which, in some years, bore a profusion of flowers. Our drawing was taken from a specimen communicated in June last by Thomas Wildman, Esq. late of Layton.

Grows naturally in the swamps of Virginia, Carolina, and the Illinois. Introduced in 1724 by Mr. Mark Catesby.

N 2104

Pub. by S. Curtis. Walworth. Oct. 1. 1829

LYCHNIS FULGENS. FULGENT LYCHNIS.

Class and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 1-phyllus, oblongus, lævis. *Petala* 5, unguiculata: *Limbo* subbifido. *Caps.* 5-locularis.

Specific Character and Synonym.

LYCHNIS *fulgens*; floribus ternis fastigiatis, petalis quadrifidis: laciniis exterioribus subulatis, foliis ovatis hispido-tomentosis.

FLOS CONSTANTINOPOLITANUS altera et minor species Gesneri. *Dod. Pempt.* 178 ?

DESCR. *Stem* simple, erect, rounded, hispid, with the hairs pointing downwards. *Leaves* opposite, crossed, ovate, rough-tomentose. *Flowers* terminal, sessile, crouded together, and supported by the upper pair of leaves, smaller and more acuminate than the rest; in all the individuals that we have seen, consisting of three only, of a vivid scarlet colour; the centre one flowering first, and after that fades, the two side ones together. *Calyx* oblong-ovate, ten-angled, 5-toothed: *teeth* erect. *Corolla* spread open: *petals* bifid more than half way down: *laciniæ* divaricate, toothed at the apex, with an additional subulate lacinia on each side below the division. *Nectarium*, or *Corona*, ten fleshy oval bodies, two to each petal surrounding the faux. *Stamens* scarcely exserted beyond the corona. *Styles* 5, club-shaped, recurved at the point. *Stigmas* villous.

This plant has a near affinity with LYCHNIS *chalcedonica*, and should be placed next to it in the system. It may be the same with the smaller sort recorded by DODONÆUS on the authority

authority of GESNER, which he says is of about half the height and bears fewer flowers, which are produced the first year from seed.

It is probably a native of Russia, and quite hardy. Raised in the present year in several gardens about London, from seeds sent by Dr. FISCHER from the Gorenki garden. Flowers in July. Communicated by Mr. JENKINS from his botanic garden in the New-Road.

ERRATUM.

No. 2091, l. 11—14, *Dele* PULTENÆA *scabra*, &c. &c.

In some copies PULTENÆA *scabra* of the Hortus Kewensis has been inadvertently added as a synonym of PULTENÆA *biloba*, but is a different species.

INDEX.

In which the Latin Names of the Plants contained in the *Forty-Sixth* Volume are alphabetically arranged.

Pl.

2056 Anarrhinum bellidifolium.
2079 Anemone palmata.
2071 Anisomeles malabarica.
2046 Arabis caucasica.
2024 Arbutus Andrachne.
2072 Arum bulbiferum.
2052 Bæobotrys indica.
2094 Berckheya uniflora.
2050 Bignonia venusta.
2092 Cactus phyllanthoides.
2101 Calostemma luteum.
2100 ——— purpureum.
2047 Camellia axillaris.
2080 ———Sasanqua, β.
2085 Canna indica.
2070 Celastrus cymosus.
2042 Chrysanthemum indicum, β.
2069 Cimicifuga cordifolia.
2102 Combretum purpureum.
2093 Convolvulus Turpethum.
2059 Coreopsis ferulæfolia.
2044 Cotyledon curviflora.
2035 Crassula falcata.
2027 Crotalaria pulcherrima.
2095 Cullumia ciliaris.
2034 Curculigo latifolia.
2038 Dianthus arenarius.
2039 ———Carthusianorum, β.
2067 ———fragrans.
2053 ———ferrea.
2030 Epidendrum umbellatum.
2084 Erica fastigiata.
2087 Eucalyptus pulverulenta.
2096 Ferula persica.
2031 Gentiana crinita.
2048 Gerardia purpurea.
2103 Glycine frutescens.
2083 ——sinensis.
2055 Goodyera discolor.
2078 Hedychium angustifolium.
2051 Helianthus angustifolius.

Pl.

2061 Helicteres Isora.
2043 Ilex chinensis.
2076 Justicia eustachiana.
2060 ——— secunda.
2028 Laurus Cinnamomum.
2064 Lessertia pulchra.
2097 Limodorum falcatum.
2074 Limonia arborea.
2077 Lobelia minima.
2104 Lychnis fulgens.
2099 Mussænda pubescens.
2026 Neottia elata.
2032 Nerium odorum, γ.
2058 Nymphæa stellata, β.
2068 Œnothera grandiflora.
2098 Orobus Lathyroides.
2041 Passiflora quadrangularis.
2023 ——— filamentosa.
2029 Pelargonium dasycaulon.
2066 Phyteuma betonicifolium.
2075 Pittosporum ferrugineum.
2036 Plectranthus Forskohlæi.
2065 Protea acaulis.
2090 Psoralea arborea.
2063 —— melilotoides
2091 Pultenæa biloba.
2081 ——— retusa.
2086 ——— tenuifolia.
2033 Quisqualis indica.
2057 Reaumuria hypericoides.
2054 Rosa arvensis, β.
2049 Ruscus Hypophyllum.
2062 Salmea scandens.
2073 Seseli dichotomum.
2037 Stapelia stricta.
2040 Stevia pedata.
2045 Tagetes tenuifolia.
2088 Templetonia glauca.
2025 Thalictrum aquilegifolium.
2082 Viburnum rugosum.
2089 Viola biflora.

INDEX.

In which the English Names of the Plants contained in the *Forty-Sixth* Volume are alphabetically arranged.

Pl.
2056 Anarrhinum, Daisy-leaved.
2079 Anemone, Pale-flowered cyclamen-leaved.
2071 Anisomeles, Malabar.
2072 Arum, Bulb-bearing.
2052 Bæobotrys, Indian.
2094 Berckheya, One-flowered.
2093 Bindweed, Turbith.
2098 Bitter-Vetch, upright.
2069 Bug-wort, heart-leaved.
2049 Butcher's-broom, broad-leaved.
2100 Calostemma, purple.
2101 ——— yellow.
2047 Camellia, Axillary-flowering.
——— *vide* Sasanqua.
2042 Chrysanthemum, changeable-white Indian.
2028 Cinnamon-tree.
2102 Combretum, Madagascar.
2059 Coreopsis, Fennel-leaved.
2035 Crassula, Sickle-leaved.
2027 Crotalaria, Mysore.
2095 Cullumia, Ciliated.
2034 Curculigo, Broad-leaved.
2053 Dragon-tree, Purple.
2030 Epidendrum, Umbelled.
2087 Eucalyptus, Heart-leaved.
2096 Fennel-giant, Persian.
2031 Gentian, Jagged-flowered.
2048 Gerardia, Purple.
Glycine, Chinese.
——— *vide* Kidney-bean-tree.
2055 Goodyera, Purple-leaved.
2084 Heath, Walker's.
2078 Hedychium, Narrow-leaved.
2043 Holly, Chinese.
2085 Indian-Reed, Yellow.
2092 Indian-Fig, Rose-flowered.
2076 Justicia, Eustachia.
2060 ——— Side-flowering.
2103 Kidney-bean-tree, Carolina.
2082 Laurestine, Canary.
2064 Lessertia, Comptesse de Vandes.
2097 Limodorum, Fragrant.
2074 Limonia, Tree.
2077 Lobelia, Least.

Pl.
2104 Lychnis, Fulgent.
2045 Marigold, Peruvian.
2025 Meadow-Rue, purple-flowering.
2073 Meadow-saxifrage, Dichotomous.
2099 Mussænda, Chinese.
2044 Navel-wort, Bent-flowered.
2026 Neottia, Tall.
2068 Œnothera, Pubescent great-flowered.
2032 Oleander, Flesh-coloured, sweet-scented.
2023 Passion-flower, Palmate.
2041 ——— square-stalked.
Pelargonium, *vide* Storks-bill.
2036 Plectranthus, Forskohl's.
2075 Pittosporum, Rusty-leaved.
2065 Protea, Stemless.
2063 Psoralea, Melilot-like.
2090 ——— Tree-like.
2039 Pink, Carthusian.
2038 —— Sand.
2067 —— Sweet-scented.
2086 Pultenæa, Fine-leaved.
2091 ——— Lobed-leaved.
2081 ——— Obtuse-leaved.
2033 Quisqualis, Indian.
2066 Rampion, Betony-leaved.
2057 Reaumuria, Hypericum-like.
2080 Sasanqua, Palmer's double.
2062 Salmea, Climbing.
2061 Screw-tree, Nut-leaved.
2070 Staff-tree, Compact-flowered.
2037 Stapelia, Upright.
2040 Stevia, Seven-cleft.
2029 Stork's-bill, Thick-stemmed.
2024 Strawberry-tree, Oriental.
2051 Sun-flower, Narrow-leaved.
Tagetes, *vide* Marigold.
2088 Templetonia, Glaucous-leaved.
2050 Trumpet-flower, Comely.
2089 Violet, Two-flowered.
2058 Water-lily, Larger flowered starred.
2046 Wall-cress, Early-flowering.